Input to HEFCE consultation on KEF metrics

University of Nottingham – January 2018

Summary

The University of Nottingham welcomes the introduction of the KEF as a way of allowing HEIs to understand and communicate their successes in the exploitation of knowledge. We welcome the opportunity to learn from sector good practice, and the opportunities that any eventual sharing and mining of the KEF data might generate for new partnerships, collaborations and growth.

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?

1.1 We would like the definition of KE for the purposes of KEF to be broad enough to capture the exploitation of knowledge which takes place across the three pillars of HEIs' activity (teaching, research, knowledge exchange); which encompasses types of KE typical to different disciplines; and which includes KE undertaken with international partners or outcomes whose reach and application are international. Given the diversity in the sector in terms of overall profile of KE activity, we would caution against a narrow definition that might inadvertently encourage universities to abandon diversity in favour of convergence around a narrow norm.

1.2 We endorse a KEF which operates at institutional level with no disaggregation to subjects or disciplines.

1.3 The KEF should support good practice in KE and encourage improvements across the sector. Its form should not act as a disincentive for institutions to collaborate and share good practice. As such, we strongly endorse the recommendations of '<u>The Metric Tide</u>', around appropriate and responsible metrics. Ensuring that metrics are designed and deployed to ensure robustness, humility, transparency, diversity and reflexivity, and that they focus on outcomes rather than outputs, will reduce the likelihood of the KEF process generating perverse incentives (e.g. using numbers of patents filed as a metric might encourage rapid filing of patents of minimal impact or utility).

1.4 The KEF should not attempt to normalise the data to allow 'like-for-like' comparisons between Institutions that are often very different in nature. Denominators used to normalise may cause more problems than they will solve.

1.5 Institutions should be grouped to allow meaningful comparisons between similar institutions and to avoid comparing 'apples and pears'. Eventual users of KEF data should be able to compare type of KE activity along with scale and capacity. Established approaches such as TRAC benchmark

groups could be used, which would facilitate effective banding without the need for a complex new mechanism.

1.6 Users of KEF data will come from different stakeholder groups, including other universities, policy-makers, the public, industry, students, local governance bodies, third sector and charitable organisations. They will have different needs and the data needs to be easy to navigate for these different groups. Any eventual interactive tool based on the KEF exercise should be able to be filtered based on characteristics that make sense to these individual stakeholder groups, who should be actively consulted on its design. These might include: size of institution; subject mix and strengths; geography; specialism in types of KE activity (e.g. KTPs; Public Engagement; International activity); total university income.

1.7 REF Impact Case Studies already require a description of the KE activity that joins the research to the impact. The REF Environment statement will (from 2021) include data on the structures and support mechanisms each university has in place to support KE and Impact. Care needs to be taken to ensure the KEF complements rather than duplicates the Impact element of REF. The approach to KEF might consider the portability of REF Impact criteria such as 'reach' and 'significance' to KE activity.

1.8 Care needs to be taken to ensure that international KE is adequately recognized and measured. Failure to do this risks creating disincentives around international KE activity, at a time when international research and teaching partnerships and activity are on the increase, and are a strategically important HE sector response to Brexit.

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?*

2.1 We would not be in favour of over-reliance on the existing HE-BCI data *in its current form* given sector-wide acknowledgement of its incompleteness, and the priority it can give to some forms of KE over others (see HE-BCI return 2015-2016 responses to Section A Questions 19&20). If HE-BCI data is to be used for KEF, data definitions would need to be significantly tightened up for future iterations of the exercise to ensure their use would withstand audit.

2.2 The upcoming review of HE-BCI survey data represents an opportunity to address these issues. It should focus on ensuring definitions used produce data that is as robust and easily comparable as possible.

2.3 There is a range of existing data sets, each of which collects data of relevance to KEF (including Research Fish, DLHE/GOS, REF Impact Case Studies, InnovateUK Reports). We welcome an approach which maximizes use of existing data, but we also observe that each of these data sets is partial (e.g. Research Fish only contains data relating to RCUK-funded research), and subject to periodic change (e.g. the current transition from DLHE to GOS). Where existing data is intended to supplement HE-BCI, care will have to be given to ensure it is reliable enough to underpin national and international-level comparison.

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

3.1. On their own, metrics cannot provide a complete reflection of the range of KE activity a university is doing, or the fit with institutional KE strategy. Equally, metrics do not take into account the complex interrelations that exist between HEIs and their local, regional and national environments. We would therefore welcome further thought on a possible *narrative statement*.

3.2 This might include i) an overarching statement describing the current national economic climate (levels of investment in R&D, skills pipeline issues) from Research England, and ii) a regional contextual statement to put universities' activities and outputs in the context of regional development. This might be similar in approach to the 'Contextual Value Added' (CVA) approach previously used by OFSTED in the Schools sector.

3.3 This statement could be used as background information to explain the data profile of the university in its national and regional contexts, and to provide the opportunity to describe other KE activities and outcomes which are not easily captured by metrics. Questions 19 & 20 of the current HE-BCI informally provide part of this function. A formal statement would allow this data to be solicited and compared more transparently and comprehensively.

3.4 Across all types of relationships that underpin KE activity, we note that current metrics focus on quantity over quality, even though quality of relationship (and longevity) can be a stronger marker of success. In all activities, we would like thought to be given to how to measure the quality of a relationship (this might include opinion survey from partners and wider stakeholder groups).

3.5 *Student-related activity* is currently not captured in a systematic way, and is under-represented in existing data. We would like to see stronger representation of student-led activity in any future KEF (appendix 1). In addition to the data already collected through HE-BCI about *staff-related activity*, we would support the inclusion of additional data related to activity such as staff volunteering; economic stewardship; cultural stewardship; collaborative research (appendix 2). We would like recognition of the *'inreach' activity* of our industry and community partners (the value that their knowledge delivers for our teaching and research activity) (appendix 3). These metrics might inform the upcoming review of HE-BCI data.

3.6 The government acknowledges the importance of the equality, diversity and inclusion agenda to economic growth and productivity. We would like to see the inclusion of data which looks at the diversity of participation in KE activities and the equity of outcomes (in terms of the diversity of KE stakeholders and 'beneficiaries'). When we refer to diversity, we mean across career level, gender, ethnicity and other relevant characteristics.

3.7 We would like thought to be given to how to recognise the in-kind contributions that industry partners make, without this being administratively burdensome. In-kind contribution should include 'in kind' revenue – normally in the form of staff time from the partner organisation to provide input into project design and governance, and 'in kind' capital – usually a donation of equipment or software. HE-BCI could be adapted to capture this.

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

4.1 We would like to see an interactive interface that allows users to select data that is most relevant to them. The tool should assist users not only to assess relative performance, but to find suitable collaborators or identify areas of best practice. The way that REF data is published, allowing user driven analysis and comparison, could also work for KEF data.

4.2 We support in principle a 'maturity index' (MI) approach to ensure maximum utility of the data by relevant stakeholders and HEIs. We see scales of maturity as a more useful indicator of progress and excellence than a graded banding (e.g. bronze, silver, gold).

There are several successful MI models publicly available (such as that at http://www.gov.scot/Topics/Economy/digital/digitaleconomy/DEMI). The benefits of an MI approach include its ability to measure the level of KE across different vectors in HEIs and to segment the sector into levels of KE maturity; to establish the characteristics of HEIs in each segment and identify the opportunities to develop (in quality or breadth) their KE activity based on their strengths and challenges; to measure progress of KE within HEIs over time.

We acknowledge that self-assessment against maturity indices may be open to gaming. We propose that exploration of an MI tool as a means of users accessing and mining KEF data form part of any eventual pilot to understand how/if gaming can be minimised. Further data to contextualize these assessments could be provided in an accompanying contextual statement (3.1-3.3).

5. Any other comments?

5.1 A single KEF across a diverse sector will be difficult to produce and very difficult to get right first time. We would strongly support pilot activity involving a representative sample of HEIs to test the viability of the data, metrics and banding approaches, and to allow any unintended consequences to be addressed. A pilot period would also give time to test assumptions about different users' needs in terms of how they might use and access KEF data.

Appendix 1: Student data and metrics

Student and graduate enterprise activities	Number of new start-ups originating with students (including social enterprises)
	Number of graduate businesses (new and ongoing)
Placements and internships	Number of students at undergraduate and postgraduate level in placements or internships with external organisations (including private, public and third sectors)
	Length and type of placement (including whether it is an embedded part of a professional qualification, a year in industry, uniquely created short internship)
Students from industry studying at the University	Number of part-time students who are employed in the private, public or third sector
Graduate retention	Graduate retention (in graduate-level employment) within the region
Student volunteering	Number of students engaged in volunteering activities (home/EU and international)
	Value of student projects in voluntary sector
	Hours of student voluntary activity
Entrepreneurship visas	Number of international students on Tier 1 (Enterpreneur) visas

Appendix 2 – Staff data and metrics

Contracted and collaborative research	Number of new research and innovation partnerships co-created with private, public and third sector organisations.
	Number of KTPs
	Number of new commercial products or services brought to market as a result of engagement with the HEI
	Number of joint publications with external partners
University start-ups	Number of (including number sustained past 2 years) new start-ups originating with staff.
Provision of expert advice or evidence	Number of academic and professional services staff who are members of expert, advisory or governance groups (local or regional / national / international / intergovernmental)
	Number of academic and professional services staff providing expert evidence or advice through other forums (local or regional / national / international / intergovernmental)
Public Engagement with Research and Knowledge	Number of public talks and lectures and number of attendees
	Number of staff giving public talks or lectures at HEI
	Number of staff giving public talks or lectures outside HEI
Staff secondments and placements into or out of industry	Number of HEI staff involved in placements or secondments in industry (SME/private sector non-SME/public or third sector). There should be a de minimis duration to avoid a perverse incentive
	Number of industry staff involved in placements or secondments in HEI (from SME/private sector non-SME/public or third sector). There should be a de minimis duration to avoid a perverse incentive
Economic, Social & Cultural stewardship	Number of academic or professional services staff contributing to economic, social or cultural stewardship through participation in governance bodies and processes
Staff volunteering	Number of academic or professional services engaged in volunteering activities, and hours delivered
	Value (in hours) of knowledge-based staff projects in voluntary sector

Partnerships with community organisations	Number of collaborative research projects with at least one community partner
	Number of formal relationships with civic bodies or cultural organisations
Schools engagement	Number of knowledge-based schools visits (outreach)
	Number of schools / pupils visiting the HEI on knowledge-based activity (inreach)
	Number of Academy partnerships

Appendix 3 – Inreach activity

Provision of expert advice or evidence to support teaching and research	Number and disciplinary spread of industry involvement on teaching and research boards
	Number of departments / courses with input to curriculum design or delivery: private sector, public sector, third sector
Academic secondments from industry into academia	Number of industry staff involved in placements or secondments in HEI (from SME/private sector non-SME/public or third sector). There should be a de minimis duration to avoid a perverse incentive