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GuildHE Response: Lord Stern's Review of the Research Excellence Framework Call for Evidence

GuildHE¹ and its research network CREST – Consortium for Research Excellence Support and Training² - submitted the following response to the Stern Review call for evidence on 24th March 2016.

Section 1

1. What changes to existing processes could more efficiently or more accurately assess the outputs, impacts and contexts of research in order to allocate QR? Should the definition of impact be broadened or refined? Is there scope for more or different use of metrics in any areas?

A key strength of REF is comparability between institutions, UoAs, and exercises. We would be wary of unnecessary tweaking of the parameters used in assessment or destabilising of the system. This would diminish the value of comparison and present institutions with additional burdens; radical changes will result in wasted investment as institutions have already begun preparations.

The inclusion of impact was a positive development for small and specialist institutions that are embedded in regional knowledge economies and whose research tends towards the translational and applied ends of the spectrum; it has allowed a broader range of activities to be captured and rewarded. Such institutions rely on those just rewards to continue their excellent research activity.

Impact as it is currently configured is sufficiently broad to enable researchers to consider impact in myriad ways although clear guidance for impact remains important. The creation of impact case studies and the resulting database has provided a strong and robust evidence base for demonstrating the impact of research, for making connections between pockets of excellence, and giving researchers examples of best practice.

The relative importance of impact should be monitored to avoid an unfair advantage for those that can afford expert copywriting for impact narratives and expensive infrastructure to capture impacts. Reconsideration of the weighting of impact in calculating allocations should balance policy drivers with the need to support discovery research; quality research outputs should remain the priority and the ultimate measure of QR.

The interaction between research and teaching, and the impact of pedagogical research on teaching practices within institutions, was not valued in REF 2014. As excellent teaching is supported by and underpinned by excellent research this type of research has great relevance for all institutions and the TEF. Articulating and rewarding the ways in which institutions make this connection and sustain this impact would be welcome.

¹ GuildHE is one of the two officially recognised representative bodies for Higher Education in the UK.

² CREST is a sub-association of GuildHE, bringing together 22 smaller and specialist research active higher education institutions in the UK: www.crest.ac.uk

Metrics have a role to play, but they should not be substituted for or divorced from qualitative assessment of outputs, impacts, and contexts. Peer review remains the most robust form of assessment, although we would welcome innovations here, such as looking at other international peer review examples, including interdisciplinary experts, and international scholars. Over-reliance on bibliometrics poses a significant financial burden for institutions - such information is often only accessible through payment to a publisher; we would not welcome a situation where financial outlay was an increasing factor in staying competitive in the REF.

We support the findings of James Wilsdon in 'The Metric Tide'; metrics cannot replace peer review in the next REF, and there is considerable scepticism across the sector about the broader use of metrics in research assessment and management. This is particularly true of arts and humanities where there are few standard practices for citations and a greater diversity of research methodologies and modes of outputs; in these subject areas current indicators and data infrastructures are not strong enough, and perhaps due to the character of the disciplines never will be the most appropriate measurement, to support extensive metric-driven evaluation.

2. If REF is mainly a tool to allocate QR at institutional level, what is the benefit of organising an exercise over as many Units of Assessment as in REF 2014, or in having returns linking outputs to particular investigators? Would there be advantages in reporting on some dimensions of the REF (e.g. impact and/or environment) at a more aggregate or institutional level?

Units of Assessment allow for comparison between institutions and research groups, and benchmarking progress. We would welcome as little change to the UoAs as possible to ensure comparison between exercises, and to reduce the burden on institutions who have systems in place which match their researchers and research groups to UoAs as they are currently configured.

There are limitations to the current system of UoA-based assessment with regard to specific methodologies, such as practice-based research, interdisciplinary, and collaborative research. These rarely fit easily within the scope of a single UoA, and may therefore be assessed by panels unfamiliar with the area being researched. Mechanisms for assessing such crossovers between UoAs may include an institutional-level assessment and enhancements to peer review panels (see Q1).

Linking outputs to individual investigators has some benefits such as reputational advantages for those selected and recognition of excellence wherever it is found, even within very small cohorts. The weightings which allow the inclusion of part-time and staff with other restrictions on their overall capacity go some way to ensuring a diversity of academics are eligible to participate.

Decoupling outputs from individuals, and instead allowing institutions to select the best research from the whole cohort of individuals is an attractive proposition. It would allow a more coherent assessment of quality across research areas, and enable all researchers to potentially contribute. The current link to individual researchers has a potential reputational consequence for younger and newer researchers and research groups. They may be excluded from the submission in deference to or 'hidden' behind the principle investigator. As a sector we must recognise the progression path of researchers and value burgeoning, risky and creative ideas. A decoupling of outputs from individuals

could enhance the importance of the overall research culture within institutions, and of driving up quality as a collective effort.

Institutional aggregation could be used to assess the environment element of the REF, but we have concerns over the use of an institution-wide measure. For smaller institutions such aggregation may dilute the importance and perceived quality of pockets of excellence, and works against the principle of funding excellent research wherever it is found. Within environment statements it is also important to allow room for individual research areas and disciplines to be able to articulate their particular contribution; this is true for specialist institutions where there exists a much finer grain of difference between research areas but where these are important in articulating the character of the research outputs. An institutional impact statement would be challenging for similar reasons.

Section 2

3. What use is made of the information gathered through REF in decision making and strategic planning in your organisation? What information could be more useful? Does REF information duplicate or take priority over other management information?

As an external peer-review exercise that complements internal review systems, the REF provides institutions with useful information on perceived research strength and impact, and has become a valuable dataset with which to support strategy. The exercise - including both the data collection and the results achieved - gives a focus for resourcing and supporting research developments, for identifying areas that require additional support, locating where greater impact can be developed, and particularly in specialist institutions the development of strong research themes that greatly enhance the research culture and environment. REF provides useful benchmarking with peer institutions, and can be helpful in opening up discussions of research strategies at institutional and, to some extent, departmental levels. The experience of creating and receiving positive feedback on impact case studies has helped colleagues share best practice, and with the design and direction of current and future projects with non-academic partners, in particular with industry and SMEs.

Arguably REF data has currency only in the immediate years after the exercise; towards the next cycle the information used to inform strategy is likely to emerge from developments over the interim period. There is perhaps a value in some aspects of the REF maintaining better currency. This is not to argue for more regular full assessments but for a more frequent opportunity to update certain elements of the data, such as environment metrics.

More detailed, richer and specific feedback from panels at UoA level is desirable. This would be significant additional work but would be of great value, particularly to institutions entering new or different UoAs to the exercise, which are building their capacity, or are at thresholds of excellence ratings. At present such qualitative feedback has to be 'decrypted' from more general statements.

For smaller and specialist institutions the exercise is unlikely to duplicate other management information at the time of assessment, but it does not take priority over other information in decision making. As institutions prepare for the next exercise, it is the new data collected that will

inform decision making; another argument for making few changes to the data requested by the exercise. REF provides a quality judgement that other management information does not and offers a dataset which is understood in a wider context not achievable otherwise. Whilst REF information is used in management systems, for example individuals making use of the REF outcomes to support promotion or assessment, or assessing a department, it informs but is not the ultimate basis on which decisions are taken.

With the introduction of the TEF, there is a risk of conflict of institutional resources and priorities between the REF and TEF. We would welcome a joined-up, complementary approach to data collection for both exercises to assist institutions respond to these parallel, and ultimately interconnected assessments.

4. What data should REF collect to be of greater support to Government and research funders in driving research excellence and productivity?

Postgraduate researchers are vital to the ongoing health and productivity of UK science and research. Currently the experience of postgraduate researchers is captured only through crude metrics in REF, and there is an opportunity to draw on sector-recognised data to acknowledge the distinctive experiences that institutions provide. The Postgraduate Research Experience Survey (PRES) conducted by the HEA has been used by some institutions to acknowledge this aspect of their research environment in their REF submission, but the results could arguably be more fully integrated.

The impact case study database provides an incredible insight into the best research taking place across the sector, and can articulate how this research benefits UK taxpayers, research collaborators outside of academia and other beneficiaries. More extensive use and interrogation of this data may provide further useful insights for research funders and government.

The use of REF data in the creation of thresholds for research funding programmes' eligibility criteria or in decision making processes is problematic. Whilst this data has currency for a time after the exercise, institutional foci, personnel, and research outputs change over the interim period. As demonstrated by the differences between RAE2008 and REF2014 results, there can be significant changes to research quality and environment in the cycle of assessment particularly amongst smaller and specialist institutions. We would welcome the use of more current quality profiles and evidence to support research funding mechanisms, especially where thresholds are being used for eligibility, that reflect such developments.

Overall, we would welcome the prioritisation of creating robust and interoperable datasets amongst those that already exist and / or are already being collated, rather than introducing radical changes or collecting new data types for the sake of it; it is challenging for institutions to commence collecting data without due notice, and accurately reflecting activity can require new and expensive systems to capture and curate the relevant information. We would also warn against hastily adopting metric-based quantitative data approaches. Incremental introduction of metrics, when there is good evidence for their implementation, will allow for their appropriate and responsible use in the management of the research system.

Section 3

5. How might the REF be further refined or used by Government to incentivise constructive and creative behaviours such as promoting interdisciplinary research, collaboration between universities, and/or collaboration between universities and other public or private sector bodies?

REF is an effective method of incentivising changes to behaviours as it reaches deep into university research, although this is not the explicitly stated aim of the exercise. We would advise that key policy principles are kept at the core of any future refinements, such as: funding excellence wherever it is found and upholding the Haldane principle; that any future infrastructure managing QR and REF maintains a distinct status to more competitive-based and restricted funding mechanisms; and adjustments made to incentivise or change behaviour are not prioritised over assessment of research quality.

Small and specialist institutions strategically promote interdisciplinary research for its inherent value in addressing complex social problems. We would welcome a clearer recognition of interdisciplinary research in future exercises. As outlined in the Nurse Review, recognition for and assessment of interdisciplinary research remains a challenge. Recent government allocations for science and research funding somewhat addressed the need for distinct funding mechanisms for interdisciplinary research, but this scheme will not support all interdisciplinary research and other public funding must address the concerns raised.

The encouragement of interdisciplinary research is anecdotally hampered at institutional and sectoral levels by the tendency towards discrete disciplines in REF. Researchers shy away from interesting and fruitful interdisciplinary opportunities as the outputs are possibly less likely to be submitted; they do not sit neatly within a single UoA, or are best placed in a UoA not being submitted by the institution. In addition interdisciplinary and collaborative projects are often achieved over a longer timeframe than those pursued by an individual researcher.

Mechanisms that allowed more flexibility for interdisciplinary projects would incentivise this kind of research and avoid researchers tending towards the 'status quo' of producing traditional outputs. This may be achievable through a cross-UoA or cross-institution assessment of outputs and an appropriate assessment framework, such as peer reviewers with experience of interdisciplinary research. We do not suggest combining or reducing the number of UoAs, but better interaction between them.

We welcome the recognition of the work of research teams in REF, not solely giving credit for outputs which are a product of a collective endeavour to a lead investigator. To truly encourage collaboration beyond academe, it would be advantageous to acknowledge the contribution of external research, professional, and practitioner partners within a less-individual focussed arrangement.

In REF 2014 institutions highlighted collaborations with external bodies, including other universities, in their impact and environment statements. The narrative structure of these allowed for promoting those of a high value, but did not perhaps give an integrated picture of interactions. Future exercises

could incorporate a more systematic collection of data pertaining to such collaborations, and reflect rewards for sustainable and innovative collaborations accordingly. The incorporation of other existing data, such as that collected for HE-BCI may be relevant; ideally such datasets would align with the REF to allow for such cross-referencing.

The Open Access requirements of the next exercise are a considerable influence on the behaviour and choices of institutions and individual researchers. This is in essence a positive development, with the potential to increase the reach and impact of publicly funded research, and to enable collaboration between universities and with other bodies and institutions through better access to the research produced. We would welcome the continued pursuit of Open Access principles, balanced with the needs of researchers to protect their intellectual property, and prioritising fair and reasonable access to publicly funded research above the commercial interests of publishers.

Section 4

6. In your view how does the REF process influence, positively or negatively, the choices of individual researchers and / or higher education institutions? What are the reasons for this and what are the effects? How do such effects of the REF compare with effects of other drivers in the system (e.g. success for individuals in international career markets, or for universities in global rankings)? What suggestions would you have to restrict gaming the system?

For REF2014 researchers were under pressure to meet a certain number of outputs within a prescribed time period. Anecdotally this leads to: researchers selecting safer, less risky, and short term projects that result in more certain outputs to meet the requirements; a 'rush to publish' when research may benefit from further work; selection of journals which otherwise the researcher may not have targeted in order to achieve an output; increased competition for popular journals and a challenging market entry for new outlets; researchers feeling compelled to apply for funding, even if tangential, due to the symbolic prestige attached to achieving external grants. It may also lead researchers to 'tick off' three, easier to achieve, outputs, in order to include a fourth which is more substantial, or to replace a longer-term, harder to realise output such as a monograph. Non-inclusion in the REF is seen as a serious career setback, even if institutions do not use this factor in performance reviews.

There are other influences at play in these choices, including peer group, institutional strategies, disciplinary tendencies. However it is clear that the timeframe, structure, and parameters of the REF have a combined effect on what researchers produce, when, and where, which may not always have positive effects on individual careers or the sector as a whole.

The current connection between individuals and outputs may result in an unintended bias against interdisciplinary, collaborative, long term or complex research in favour of achieving safer, more obvious results. A proportional approach that decoupled individual researchers from outputs may alleviate this pressure, and enable researchers to put forward their very best research and take greater risks over the census period. Greater flexibility in terms of the number of outputs per individual would incentivise better, more efficient, ground-breaking research.

Current definitions of researchers in REF pose problems for small and specialist institutions whose cohort of students are more likely to be entering research careers later in life and with significant teaching or industry experience / responsibilities. The term 'Early Career Researcher' drawn from a 'standard' graduate career path is less applicable. The pace at which they develop a research profile may vary significantly from the standard timescales, for very valid personal and professional reasons. Future exercises should consider the true diversity of researchers in the UK, and consult on the appropriateness of the definitions applied.

The inclusion of impact has raised the profile of quality applied and translation research, and enabled basic or discovery research to better articulate and appreciate wider benefits. There is some concern that the impact case study requirement led to a 'cottage industry' (See Q1); this approach undermines the good intentions and overall fairness of the exercise. More importantly the impact requirement may influence the design of research in order to collect evidence of impact suitable for inclusion in case studies, rather than allowing the impacts to emerge from the needs and goals of the research itself.

REF influences the choices made by institutions around research investment to improve future performance in assessment. It has been of great value in providing evidence for institutions in the achievement of RDAP. For smaller and specialist institutions global rankings and league tables are less relevant, and tend to reinforce the status quo. In contrast REF results provide useful benchmarking opportunities against more appropriate competitors.

Gaming the system tends to be most noticed when researchers are 'poached' just prior to the census date, either prompted by the individual seeking career advancement, or by institutions looking to enhance UoAs. We would suggest measures to apportion the outputs of these late moves, either by redrawing the parameters of the census date (i.e. to have been employed for x months prior to the date, not just on the date, or length of retention after the census date), or by recognising time spent at both institutions in the eventual scores allocated.

7. In your view how does the REF process influence the development of academic disciplines or impact upon other areas of scholarly activity relative to other factors? What changes would create or sustain positive influences in the future?

Although REF is couched in terms that allude to world-leading and internationally recognised research, it is not clearly evidenced that the meaning of the results of the exercise are understood by international partners or other non-academic collaborators. This is anecdotally true of the creative disciplines. The timeframes imposed by the exercise can make international and industry research collaborations less likely as they seem so arbitrary to those outside the exercise.

Creative and practice-led disciplines are somewhat disadvantaged in the current system. One of their emerging methodologies - practice-based research - is less well understood and more difficult to 'measure' in terms of quality, and perhaps as a result, fewer inclusions of such research were made in the last REF than were expected. Experimental, practice-based projects also require significant investment to document adequately for the REF, and the infrastructure required to adequately capture and preserve outputs has yet to be adapted and adopted.

Pedagogical research has been viewed with some scepticism (see Q1). Some research outputs were excluded, for example text books, and impact case studies which highlighted positive impact on learning and teaching within the same institution were ineligible. This has reinforced a false divide between research and teaching. We would welcome the reconsideration of the value of pedagogical research within the REF, and the esteem which research-informed teaching and curricula is afforded in assessment, in the context of current policies around teaching excellence.

The focus on REF has resulted in the withdrawal of academics from wider academic contributions at institutional level, and the development of academic disciplines depends on many and various effective interactions between researchers, educators, students, practitioners, and beneficiaries.

Research concentration has been an unintended consequence of REF; some subject areas have diminished across the sector as they have not generated adequate research income, whilst others have been funnelled into a small group of institutions. This has an effect on teaching quality and student choice, and some disciplines will not have a strong or broad research base from which to draw. This may be addressed through more equitable distribution of QR between subject areas, and recognition of subjects at risk, in a similar vein to the way STEM has been given additional support in recent years.

The review should acknowledge that smaller and specialist institutions and their specialisms may have different needs and behaviours to the norm, and that REF should not dictate the boundaries within which disciplines and institutions should operate but rather facilitate the testing of them.

Section 5

8. How can the REF better address the future plans of institutions and how they will utilise QR funding obtained through the exercise?

The results of REF2014 are testament to the quality and international relevance of the research and impact produced by small and specialist institutions, yet the overall share of public investment they receive is scant.

Provision for the achievement of future plans is a potentially interesting innovation for such institutions who are actively building on their success to support new and emerging areas of research excellence. This approach would align well with the current government policies for expanding the market in higher education and enabling choice for researchers and students.

Our overall priority remains that excellent research is supported wherever it is found and that assessment does not hinder the creativity and autonomy of institutions to break new ground. We are therefore somewhat sceptical as to how such future-based provision would be assessed and implemented in practice. QR enables institutions to be responsive and support innovative research; a shift of focus to predictive research priorities may lead to over-claiming and unrealistic promises, thus undermine the integrity of the endeavour.

The current Environment statement makes provision for the inclusion of intentions for research development, and this usefully connects to previous exercises. In some respects the impact case

studies also allow provision for future plans and priorities. There may be scope for providing more specific guidance around these statements with regard to future plans and how institutions will extend and leverage QR investment. Should frequent interim assessments be a possible way forward we would be wary of the over reliance on metrics, but would welcome the consideration of other forms of evidence of development and achievement, such as HR Excellence Awards, PRES results, achievement of RDAP etc.

We would point the review to some recent criticisms made of the pathways to impact statements required by RCUK for some of the issues such forecasting presents to academics and institutions (see <https://www.timeshighereducation.com/news/academics-regularly-lie-to-get-research-grants>). It is not unsound to request intentions in principle, however it may be rather challenging to realise and reward on that basis in practice.

Final thoughts

9. Are there additional issues you would like to bring to the attention of the Review?

Smaller and specialist institutions, such as those who are represented by GuildHE and belong to our research network CREST, rely on QR allocations. QR is often the only part of the dual-funding arrangement that they receive. As such there is great importance in getting the parameters and structures of the REF right; the costs involved in running the exercise are perhaps to these institutions wholly viable if it provides fair and reasonable assessment of their strengths. Their performance in REF2014 is demonstrative of the quality and excellence found in such institutions' research. Having fair access to public research funding is vital for the overall health of the UK science and innovation.

Whilst we continue to welcome the governments' commitments to the principles at the heart of QR, we hope to see those reflected in practice throughout the research funding infrastructure as it undergoes changes. We hope that the review will highlight the importance of policy informing practice in this way.