

## Response ID ANON-CVDF-YWSQ-Q

Submitted to **Research Excellence Framework review: call for evidence**

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### Introductory Section

#### A Name

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AIRTO Ltd (Association of Innovation, Research & Technology Organisations)

#### E Please tick the box that best describes you as a respondent to this consultation

Representative Body

**F If you selected 'Individual,' please describe any particular relevant interest; teaching staff, student, etc. 'Please expand or write NA if not applicable.**

**Please enter here:**

NA

#### G If you selected 'Other,' please give details. 'Please expand or write NA if not applicable

**Please enter here:**

NA

### 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?**

**Please tell us your thoughts in no more than 500 words:**

The REF is a hugely costly exercise, and any possible steps to reduce cost, while still maintaining valid outputs, should be taken.

In practice the REF drives institutional behaviour. Some of this behaviour e.g. an increased emphasis on impact and collaboration, is both desirable and intended. The REF also influences the balance between pursuits of curiosity-driven versus applied research. Some inducement to align this balance may be needed, perhaps by the REF assessment process taking more account of relevance of research in addition to focussing on quality. Research excellence should be determined more objectively and in a way that is not disrupted by the process itself. Modifications to the current system should be made to:

- simplify and reduce cost and the burden of preparation on institutions;
- avoid measures that induce actions by institutions which are designed just to maximise REF scores, over and above maximising more widespread benefits to other stakeholders;
- increase emphasis on alignment of research with a national strategy;
- introduce an assessment of forward plans by institutions for developing new research and innovative applications of research outcomes;
- increase industry involvement in the assessment process.

**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?**

**Please tell us your thoughts in no more than 500 words:**

AIRTO is not in a position to comment on the detailed process components of the REF methodology.

## 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?**

**Please tell us your thoughts in no more than 500 words:**

AIRTO is not in a position to comment on this aspect of the REF review.

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

**Please tell us your thoughts in no more than 500 words:**

Data should be collected that can facilitate identification of the UK's major areas of research strength – which should inform the formation of a national research strategy for the UK. This endeavour should pinpoint how research strengths relate to national priorities (i.e. it should be a 'top down' as well as a 'bottom up' derivation of a national research roadmap). Such a strategy is currently lacking; it would set out national research priorities and identify opportunities (e.g. for collaboration) in a clear road map.

## 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?**

**Please tell us your thoughts in no more than 500 words:**

Whilst the QR is clearly intended for allocation of academic funding to universities, there would be some benefit in noting the principle which was adopted by the Nurse Review of the Research Councils. The Nurse Review emphasised that investment in research endeavours should be based on excellence alone – wherever that excellence exists. Formation of a national research strategy – as proposed in our response to question 4 above, should stimulate and incentivise the formation of more collaborations between universities and the components of the Innovation, Research & Technology (IRT) sector, i.e. Public Sector Research Establishments, independent Research & Technology Organisations, Research Associations, Catapult Centres etc.

## 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?**

**Please tell us your thoughts in no more than 500 words:**

AIRTO is not in a position to comment on this aspect of the REF review.

**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?**

**Please tell us your thoughts in no more than 500 words:**

The REF is structured so that the QR rewards excellence, and this is a vitally important principle to continue following. However resource allocations via QR are occurring independently of any national research strategy. Thus publicly funded scholarly and applied research endeavours that are occurring outside of universities e.g. in national laboratories, are subject to separate decision making processes regarding their investment. There is a risk that without any national, overarching research strategy, decisions around research funding are heavily fragmented, and the overall distribution of funding is not being sufficiently strategically driven. Weighting should be given to priorities identified in the national research strategy, strategic innovation priorities, and the key societal challenges faced by the nation. Giving some weighting to alignment with the UK's strategic innovation priorities is important to achieve an effective balancing of technology push and business pull across the full research portfolio.

## 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?**

**Please tell us your thoughts in no more than 500 words:**

AIRTO is not commenting on the specific mechanics of the way the REF is run. However development of a national research strategy, which sets out overarching priorities for the UK, that looked forwards to define opportunities for investment in, and impact on, national productivity in key sectors for the UK (e.g. to complement the Government's Industrial Strategy and feed into its Productivity Plan), would ensure a more robust and productive approach was adopted to allocation of funding. Such an approach would have the ability to prioritise collaborative and cross-disciplinary research endeavours to maximise and utilise all that the UK has to offer in terms of research excellence and capabilities – not simply expertise residing in academia alone. A component of the REF could be introduced requiring submission of plans for increasing future research quality, application development and associated teaching in order to assess the probable future impact of QR funding awarded.

## Final thoughts

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

**Please tell us your thoughts:**

The primary purpose of the REF is to inform the allocation of quality-related research funding (QR) in academia. The UK has some of the world's best universities. Recognising that academia is a national asset for the UK, it is right and proper that the Government continues to invest sufficient public resources to continue to support the success of these thriving institutions. However, the research capabilities of the UK do not reside in universities alone. Much of the UK's applied research capabilities reside in the UK's thriving IRT sector which continues to punch well above its weight in the national economy, as shown by an independent study commissioned by AIRTO and carried out by Oxford Economics in 2014\*. The IRT sector:

- has tripled in size to £6.9Bn per annum since 2006
- consumes just 0.3% of Government spend
- displays productivity 45% higher than the national average
- generates a contribution of >£32bn to UK GDP (>2.3% of the total) and >£13Bn to UK tax revenue
- supports 140,100 jobs - equivalent total employment of Milton Keynes
- directly employs >57,000 highly skilled people, equal to total academic staff of the Russell Group, and considerably more than Germany's Fraunhofers

The review should consider the potential benefits of introducing 'weighting' to the REF for research departments that collaborate with the IRT sector, as a potential indicator of translational research drive and capabilities. To foster improved linkages between academia and the IRT sector, it may be worth involving some of the best people from the IRT sector in appropriate elements of the REF process. There are many visiting professors working in the sector who could usefully assist in such a manner.

\* Reference: The impact of the Innovation, Research and Technology Sector on the UK Economy; Oxford Economics, November 2014.