## Research Excellence Grant and Research Postgraduate Grant responses

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In what capacity are you submitting your	Organisation
response?	
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Overarching issues	
Q1. If it were necessary, what would be the	Changes to REF2021 submission and evaluation could potentially lead to substantial volatility within
implications of delaying implementation of REF	REF results and consequently to REG allocations for universities. The likely funding changes for
2021 results and changes to REG until AY 2023-24?	individual institutions are thus difficult to predict.
	Following the announcement of REF2021 results in May 2022, if SFC implement changes to REG from 2022-23, transitional funding will be essential to mitigate against any unmanageable reductions in institutional income and potential detriment to research and knowledge exchange activity and roles.  Abertay accepts that some delay to the implementation of REG changes may be inevitable. Therefore,
	delaying the introduction of REG changes to 2023-24 with early notice of institutional allocations in 2022-23, will permit effective planning and budget setting by Scottish institutions to limit any destabilisation or negative impact. The delay should not go beyond 2023-24.
Q2. Should SFC seek to limit downward changes in REG experienced by individual universities post REF2021 and, if so, what should be the scope of any adjustments made?	REG and Research England's QR funding are integral to our dual support system for research and contribute significantly to the foundation and infrastructure that make research possible. Given the unprecedented challenges faced by the sector as a consequence of Brexit, real term budget and international research collaboration funding cuts, as well as the ongoing impacts of COVID-19, REG funding will be essential to provide some stability and resilience for the research and innovation ecosystem.
	REG is designed to support and reward excellence and is critical for research to flourish in Scotland. We believe that research excellence should continue to be supported and rewarded wherever it resides, to

support our reputation and ability to attract international students, excellent staff, investment for innovation and impact, leveraged funding and broad collaborative networks here and across the globe. Nevertheless, Universities have varying missions, aspirations and regional roles, and academic staff and indeed disciplines are at different stages of development and maturity. Limiting significant downward changes in REG will help ensure stable funding and support institutions to plan, grow and execute sustainable long-term strategic objectives with respect to research and innovation, thereby supporting early and developing academics and emerging discipline areas which add to the diversity and long-term resilience of that research and innovation ecosystem.

We believe that is sensible to take steps to create a framework that will offer a level of stability for institutions with respect to research funding. Given financial pressures on institutions over recent years, and how these pressures are felt unevenly across the sector (2019 Audit Scotland Report on the Finances of Scottish Universities ) it would seem prudent on the part of the SFC to ensure that volatility in the system is managed to some degree across the different funding streams.

The first principle under consideration in the scope of any adjustments made should be the sustainability of finances and stability in terms of research capacity. There needs to be a consideration made for the relative impact on an institutions overall research income caused by any downward changes. A secondary consideration should be strategic importance of funding to wider national objectives of government. And thirdly, the relative impact of research in the local area or region.

The adjustments required might be effected by ensuring some continued baseline funding of 2\* alongside 3\* and 4\* research, to support the development of new areas and strengths. This baseline funding would also align with a fundamental Stern report principle: that all research active staff should be returned to the REF. Not to fund 2\* would be at odds with this central principle, might disadvantage developing early- and mid-career academics, is at odds with equality, diversity and inclusion efforts, and impact staff on short-term research contracts and those with contracts demanding significant contributions to teaching as well as research.

As we look to an inclusive and sustainable recovery from the pandemic and to Scotland's role in responding to key global challenges, University research and development is a proven asset that is key to our economic, social and cultural renewal, to driving innovation and developing solutions, if it supported appropriately.

Q3. You are invited to comment in your answers
throughout the document on opportunities for and
barriers to advancing equality and achieving
inclusion. Overarching comments related to the
aims of the public sector duty in the context of this
review should be made here.

Modern universities in Scotland make a remarkable contribution to access and participation to university as well as advancing equality in all aspects of university life. In Scottish higher education, 56% of students from disadvantaged backgrounds and 66% of mature students study at modern universities. Modern universities represent one third of institutions, which underlines the disproportionate impact they make in relation to the statistics offered above. As well as socioeconomic significance, modern universities like Abertay have an important geographical (often local) reach and in doing so advance equality and inclusion, as many of these areas which represent some of the more peripheral and deprived communities in Scotland, would not otherwise be served by higher education. Furthermore, research with impact can play a role in local economic development and community prosperity, so further concentration of research funding around the most research-intensive institutions, at the expense of other communities and regions, should be prevented.

Social and geographic inequalities also exist in terms of research funding. There is a broad correlation between the more affluent and productive geographic areas of the Scottish economy and research funding, as well as a broad correlation between the class or socioeconomic status and participation in research. Furthermore, there is a strong principled argument to be made that all universities should be undertaking an appropriate level of quality research, to inform teaching and expose students to a high-level learning environment that has research with impact embedded into the ethos of the institution. This will help to boost access and diversity in postgraduate research, and by extension, the research community.

The REG adjustments requested in Q2, where some continued baseline funding of 2\* alongside 3\* and 4\* research is required to support developing and emerging areas and strengths, would help limit further social and economic inequalities due to the concentration of research funding into the research-intensive universities, and is cognizant of the relative impact of research in different areas, and how this impacts local communities and economies. This approach to REG adjustment will also support participation and the career development of diverse researchers, including those transferring from practitioner backgrounds or careers, early career academics and those with contracts demanding significant contributions to teaching as well as research.

## Q4. How important (or otherwise) is it that the Scottish approach to underpinning research

We wholeheartedly support the principle that the REF assessment exercise itself should be consistent across the UK. However, any underpinning research funding allocated through REG and RPG, although

funding is in step with the rest of the UK? What elements of consistency (or distinctiveness) in SFC's approach influence Scottish HEIs' research competitiveness?

informed by REF scores, need not be completely in line with Research England and the rest of the UK. Scottish universities are already operating within a different funding system of controlled home student numbers and limited capacity for income generation through fees. Scottish institutions must also align with Scottish Government priorities, such as those supporting inclusive growth. A more devolved or place-sensitive framework for research does not necessarily mean divergence from Westminster, as the UK government will be seeking to focus more on place through its levelling-up agenda, which is also likely to bleed into the work of UKRI.

While it is important that REG continues to reward and support excellent research and therefore the competitiveness of Scottish institutions with their UK and international counterparts, some provision for research of 2\* and 3\* quality will support the development of emerging areas of excellent research with social, cultural and economic impact.

For example, the REF2014 submission of Abertay staff involved with our current Computer Games/Arts and Cybersecurity successes was extremely limited as many were early career academics with only developing research profiles. Without SFCs support for 2\* research, impact and environment, growth for these staff and discipline areas would have been constrained. Since 2014, and through further largescale research funding support via partnerships with other HEIs (notably £1.2M from SFC for the SFC Moving Targets project and £5M from AHRC for Design in Action), Abertay has established an impressive reputation for computer games research and innovation, with one of its largest REF2021 submissions being UoA 32 (Art and Design: History, Practice and Theory), and currently leads (in partnership with the Universities of Dundee and St Andrews) InGAME, the UK Creative Cluster for Computer Games (AHRC, £9M (with £0.5M from SFC). Our research has had substantial impact on the creative industries sector regionally and across Scotland. The UK Prototype Fund impacts were 70+ businesses supported, 75% of companies releasing new IP, 489 jobs created / safeguarded (including 53 graduate jobs), and 72% of SMEs reporting additional funding levered (£2.8m). Design in Action delivered wide reach (633 SMEs attended events), income generation (£318,937 Design in Action grant funding for projects and £672,400 of funding from other sources secured for projects) and job creation (81 jobs through funded projects). InGAME draws on best practice from the above and is expected to have impact commensurate with its increased scale. InGAME has to date undertaken 106 R&D projects with the games industry (and is well positioned for its target of 125), leveraged £6.9M in co-investment, provided networking/training to >700 individuals, and won the TIGA Excellence in Games Research 2021 award. R&D projects have generated new jobs, stimulated investment in games companies,

	sponsored residences, and with V&A Dundee to offer six places on the Design for Business Accelerator programme. InGAME is actively supporting the Tay Cities Deal project in respect of the 5G R&D Testbed.  Similarly, Abertay has from 2014 developed its food and drink RKE into a new REF2021 submission to UoA6: this growth in a strategic area for us and Scotland has been enabled by SFC support for 2* research, impact and environment. Working in close collaboration with academic partners, the Scotch Whisky Research Institute, and industry (including global leaders in alcohol production), Abertay University has led research into sustainable alcohol production with positive impacts for the environment. Our RKE activity has included improved bioprocess productivity leading to commercialisation of new quality products, including beer, spirits, and wine. For example, our research has resulted in a completely new range of faba bean based beers and the world's first Climate Positive pea-based gin being introduced to the marketplace by Scottish breweries and distilleries. Significant environmental benefits have been made possible by innovative Abertay-led research that exploits legume starches for beverages and legume co-product protein for animal feed production. Compared to the use of conventional cereal crops our industry-facing research helps achieve substantial global mitigation of greenhouse gas emissions and nutrient leakages to the environment. Our research into
	transition paths to legume-supported food and feed chains have been presented to and supported by The Scottish Parliament and the European Commission. A hugely successful KTP with the world's largest alcohol producer (Diageo Plc.), helped identify new avenues for whisky distillery coproducts that have high value, but a low carbon footprint. We have driven scientific advancements, enhanced market opportunities and sales, and contributed to local and national economies and had substantial impact on the beverage alcohol industry in terms of supporting sustainable alcohol production and improving bioprocess productivity. Our work has led to sustainable entrepreneurship, innovative business development and new quality product development. Our research contributes to Sustainable Development Goals 8, 9, 12, 13 and 15.
Q5. In the changing research landscape, is the balance of funding between SFC's underpinning support for research and underpinning support for PGR training & environment optimal?	The balance of funding for REG and RPG is appropriate. However, we request that attention is given to the calculation of RPG to limit duplicated support of DTP/DTC Postgraduate Research Student numbers, at the expense of Postgraduate Research Students and institutions not already supported by UKRI.
Research Excellence Grant  Q6. Views are sought on the principles proposed	We endorse the principles proposed for REG. We believe these principles would be best supported by

for REG and on whether the proposals within this paper are consistent with the principles.	the suggestions made in our response and in particular to Qs. 2-5.
Q7. What are your views on whether the current quality weightings for 3* and 4* REF scores are fit for purpose?	Please see our response to Qs. 2 - 4.
Q8. What are your views on aligning the proportions of REGa allocated and the proportions of REF score elements?	We believe that aligning REGa allocated and REF score elements is reasonable. Having a divergence between the calculation for REF excellence profile and funding allocation appears to be an unnecessary complication. However, we believe the weighting criteria for the * rating awarded for Impact and Environment should be higher than Outputs. The benefits of university investments in Impact and Environment are typically longer term than Outputs and therefore the full value of these investments have not yet been realised (may still be in the process of being realised). To incentivise Universities to support this work the REG should reward 2* work in these areas. We therefore suggest that for Impact and Environment, all submissions should be weighted as 3 for 4*, 1.5 for 3* and 1 for 2*. This in addition to our recommendation for baseline funding for 2* research, given in answer to Q. 2-4.
Q9. We would welcome your views on the balance between the elements of the REG formula. Within the income-driven elements, we welcome your views on whether we have included the correct income sources.	We agree with the proposal to increase the % of REG allocated by reference to competitive charity income given this work allows the research base to provide charities with novel solutions to address social problems which impact on society as a whole.  We also agree in principle to increasing the proportion allocated by reference to other competitive research income, but would want this to be broadly based and to extend to include knowledge exchange activities, given the boundary between research and knowledge exchange is sometimes ill-defined.  We are concerned that an increase in REGb and REGc might cause fluctuations in funding for some subject areas and smaller institutions such as ourselves, may serve to concentrate research funding further, and will limit the capacity of institutions to support investment and long-term development of a sustainable research environment.
Research Postgraduate Grant	
Q10. Are the proposed principles for RPG appropriate and consistent with the purpose of the grant and the changing PGR landscape?	We believe the proposed principles are appropriate and consistent. Please see our response to Q 5.
Q11a. We are seeking views on the purpose of RPG	We are concerned that an increased focus on accountability will create further administrative burden

and its future role in supporting Scottish institutions to respond – individually and	and divert resource away from supporting research and postgraduate provision.
collaboratively – to the changing landscape.	We agree in principle with linking to shared national objectives and outcomes, but believe this needs to be done in a way which recognises the unique value of the research base, for example, that research may not always have immediate benefits to society and requires long-term investment. Shared objectives or outcomes are best supported through provision of excellent researcher development training and funded collaborative studentships involving different institutions and potentially with non-academic partners (e.g. the SGSAH Applied Research Collaborative Studentships).
Q11b. We are seeking views on taking forward increased accountability for RPG, for example by linking to shared objectives or outcomes, and how	We are concerned that an increased focus on accountability will create further administrative burden and divert resource away from supporting research and postgraduate provision.
SFC and the sector could work in partnership to achieve this.	We agree in principle with linking to shared national objectives and outcomes, but believe this needs to be done in a way which recognises the unique value of the research base, for example, that research may not always have immediate benefits to society and requires long-term investment. Shared objectives or outcomes are best supported through provision of excellent researcher development training and funded collaborative studentships involving different institutions and potentially with non-academic partners (e.g. the SGSAH Applied Research Collaborative Studentships).
Q12a. We are seeking views on how the RPG could play an increased role in improving participation of underrepresented groups within Scotland's PGR community, particularly within specific research areas where under-representation is most	In our experience, widening access to PGR study requires flexibility around part-time and full-time study mode, a supportive research environment involving a comprehensive and excellent development programme, and availability within their home UG or local institution which helps to addresses issues around the candidates non-academic responsibilities as well as academic relationships and role models.
extreme.	Baseline funding of 2* as well as 3* and 4* research (see our response to Qs. 2, 3 and 4), would help limit further social and economic inequalities due to the concentration of research funding into the research-intensive universities, is likely to support a more diverse pipeline of students into postgraduate study, and will ensure that the research environment offered to such candidates in not substandard.
Q12b. We are seeking views on how SFC's focus on widening access and participation could be supported by RPG in the postgraduate research	In our experience, widening access to PGR study requires flexibility around part-time and full-time study mode, a supportive research environment involving a comprehensive and excellent development programme, and availability within their home UG or local institution which helps to addresses issues

student context.	around the candidates non-academic responsibilities as well as academic relationships and role models.
	Baseline funding of 2* as well as 3* and 4* research (see our response to Qs. 2, 3 and 4), would help limit further social and economic inequalities due to the concentration of research funding into the research-intensive universities, is likely to support a more diverse pipeline of students into postgraduate study, and will ensure that the research environment offered to such candidates in not substandard.
Other comments	
Q13. Please make any other comments relevant to	n/a
this consultation.	
Publication of responses	
We may publish a summary of the consultation	Publish information and excerpts from this survey response EXCLUDING the organisation name.
responses and, in some cases, the responses	
themselves. Published responses may be	
attributed to an organisation where this	
information has been provided but will not contain	
personal data. When providing a response in an	
individual capacity, published responses will be	
anonymised. Please confirm whether or not you	
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