Section 5: 2018-19 Highlands and Islands Regional Outcome Agreement

Innovation

HE priority: effective knowledge exchange and innovation including excellent collaboration between universities and industry

FE outcome: Greater innovation in the economy – a national culture of enterprise and innovation leading to a more productive and sustainable economy

The University of the Highlands and Islands is supportive of the principles of developing effective operational links between higher education, research and innovation/wealth generation. This is aligned with the governing principles of the university, which include an ambition to support and inspire the development a knowledge-based economy.

The newly formed Research and Knowledge Exchange Committee (RKEC) monitors progress, including effective promotion of robust equality and diversity principles. The committee reports to the Principal and Vice-Chancellor through the committee structures, on:

- Engagement with external agencies, including HEIs, the private and third sectors and the enterprise agencies
- Progress towards effective implementation of the University Scotland five point innovation action plan, including advising academics on compliance with state-aid rules
- Effective training and support of staff engaged in promotion of enterprise and innovation activities.

The Vice Principal Research and Impact chairs the RKEC and membership includes the Vice Principal (Enterprise) and the Head of Knowledge Exchange.

All students - undergraduate, taught postgraduate and research - will be exposed to and inspired by the principles of wealth creation (*Priority Action (PA) 1*). Plans for a new Entrepreneurship Academy will include practitioner-led activities focused on the principles and practice of entrepreneurship as well as theory. Entrepreneurs themselves will provide the role models and the driving enthusiasm (*PA2*). The approaches recognise that not all individuals want to become entrepreneurs themselves. There are skills within the educational institutes that are, however, of broader value to wealth generation. Exchanges between HEIs and 'industry', for example, through the Knowledge Transfer Partnership programme (KTP) will offer a proven route to enhancing understanding and opportunity and the university aims to establish and support such opportunities for all staff (*PA3*).

We believe that effective nationwide benefit cannot be achieved by a single institution working in isolation from the rest of the higher education sector. We support the principles of collaboration with other institutions in Scotland, the UK, Europe and beyond. A key aim is to engage further with other institutions to harmonise and simplify contract negotiations (*PA7*). The university goes further, however, and believes that collaboration and consortium generation must include working engagement with the employment sectors themselves and, crucially, other aspects of the educational community, including the further education. The enterprise and skills agencies must also take a significant part in these developments if opportunities are not to be missed and we will work with agency colleagues to progress this.

The University of the Highlands and Islands wishes to engage fully with Scotland's priority economic sectors, including SMEs. It is acknowledged however that the distinctive environment of the Highlands and Islands encourages the development of micro enterprises, social enterprises and

community groups some of which may not prioritise growing in size but rather sustaining their activities and growing in influence and perceived benefit. These must be included in any programmes of demand stimulation and innovation if their contributions are not to be diminished and their role in strengthening and supporting remote and fragile communities is to be supported (PA10).

An annual report will be submitted to the University Court on progress against innovation targets, including: academic engagement with commercial and public bodies, use of innovation vouchers, the rate of formation of 'spin-out' or start-up ventures and their sustainability and inclusion of innovation in teaching programmes and staff development and training.

Engagement with national outcomes - nationally

In discussion with Scottish Funding Council, we have also agreed that the best mechanism to work at a sector level to deliver the national outcomes is to undertake to work together to:

- analyse current activity and identify best practice
- on the basis of this, where appropriate, devise and execute a pilot programme
- if successful, develop/initiate a sector-wide programme.

Through the Research and Commercialisation Directors' Group (RCDG), while acknowledging the importance of all the outcomes, institutions agreed to contribute in a way that makes the best use of resource, therefore each will be involved with a different combination of work.

The University of the Highlands and Islands has signed up to prioritise outcomes one to four through active involvement in the working groups focused on:

- 1. Demand stimulation
- 2. Simplification/commercialisation
- 3. Simplification/greater innovation
- 4. Entrepreneurialism

We have also agreed to play an active role in all initiatives and activities agreed by the national groups for outcomes five to seven:

- 5. International activity
- 6. Inclusive growth and social impact
- 7. Equality and diversity

Strategies and plans are still being formed for outcomes 1-4, the outcome 1 group met for the first time in March 2018. We have been an active participant in these groups helping to identify future initiatives and potential areas of collaborative focus and have recently been tasked with leading a strand of activity for the outcome 1 – demand stimulation national group. This group has already agreed to develop activities aimed at increasing engagement with multi-national companies. However, we argued that increased engagement with small and medium-sized enterprises (SME) as well as micro companies should be a focus for the Highlands and Islands region as well as elsewhere and we will lead on this strand.

In addition, the university confirms its willingness to participate fully in the monitoring framework that will be developed through Universities Scotland and RCDG, managed and reported to SFC by the new UIF Collaboration Manager. This framework is expected to become the main mechanism by

which SFC will measure the impact of UIF at a national level and should serve as a platform for the sharing of good practice.

Most of the strategies being developed by the national outcomes groups are expected to begin to become operational during 2018-19.

Engagement at an institutional level

At an institutional level, under each of these outcomes and with reference to the associated priority actions previously agreed, the university will continue to maintain and expand its operational Knowledge Exchange Network across the partnership. This operates through nodes into the different sectoral groupings. Each theme has a named 'champion', who will guide the activities, including interaction with other HEIs, commercial bodies and the Scottish and UK innovation/KE landscape, eg Scottish Innovation Centres, Innovate UK and the Catapults.

Development plans for year two of the three-year rolling programmes have now been drafted, including some revisions to targets, implementation plans and budgets.

Specific initiatives funded primarily from the Outcome Grant element of UIF are focused on three key sectors for the Highlands and Islands region: *aquaculture, energy and rural health and wellbeing.* Additional support through core Platform Grant funded resource has also been employed to develop KE activities in the *creative economy, tourism and water quality innovation.*

Each of the UIF funded sectoral group projects have their own internal targets and key performance indicators aligned with SFC's seven desired outcome priorities. These aim to provide sectoral hubs with business development and coordination resources as well as funding for business engagement activities such as events, promotions, meetings and in some cases a challenge/seed corn fund.

During 2017-18, the groups have started to engage with their relevant business sector as well as other sectoral stakeholders - regional development agencies, Interface and the Innovation Centres. Some of the research clusters and sectoral KE groups are also developing actions on national (Industrial Strategy Challenge Fund) and internationalisation opportunities with a current focus on the Global Community Challenge Fund (GCRF).

An update of each group's year two plans was provided with the 2018-19 regional outcome agreement. Regular updates from each group are reported to the relevant research cluster groups. From Academic Year 2018-19 the remit of the UISC will be taken over by the Research and Knowledge Exchange Committee.

Initiatives across the university that align to SFC's outcome and priority activities include:

Demand stimulation (Outcome 1)

Making more businesses across the Highlands and Islands aware of the opportunities and funding available to develop new products and processes in collaboration with universities, through:

- Various awareness raising outreach activities, events and meetings across the region aimed not only at private companies and social enterprises but also university staff
- Providing additional university staff training on innovation and entrepreneurship skills to help researchers and academics better understand business needs as well as be able to spot innovative opportunities (PA 5). Training includes both 'train the trainer boot camps' as well as sector specific workshops

Knowledge and expertise gained from the university's local demand stimulation activities will be fed back into the strategies and plans being developed by the national demand stimulation outcome group, particularly the SME strand.

Simplify business access (Outcome 2)

Ensuring greater engagement with business is supported through increased outreach activity by new KE/Innovation posts working closely with sectoral skills assessment staff, including:

- company visits and sectoral conferences and events participation
- Business interest group links
- Sector associations
- Trade associations
- Partnering forums industry and research groups
- Shifting from transactional to more strategic partnerships (PA 6)
- Backed up with a comprehensive CRM system and processes
- Helping to develop and ensure implementation of enhanced business: university contract arrangements (PA 7)
- Implementing a post-project referral process for all KE projects (PA8)

Simplification/Greater innovation (Outcome 3)

Delivery of further contributions to innovation infrastructure are underway including:

- Making use of investments under the City Deal process:
 - The university has secured a £9m, nine-year programme of funding under the Inverness City Region Deal to create life science and health care research and commercialisation infrastructure and outputs. The capital project is underway in partnership with NHS Highland and the joint framework procurement of the design and build team is progressing.

Funded revenue activity is also underway including some early clinical advice on the development of clinical research with commercialisation opportunities.

New appointments have been made including a Director of Health Innovation and a number of sessional clinical secondments who will work as co-investigators with the university's growing health research division

- Proposals are advancing within the Tay Cities Deal to establish a new food and drink innovation hub in Perth
- Themes around blue innovation (including marine energy, aquaculture, and water quality), health and tourism are being developed within the Islands Deal.
- The university will continue to identify gaps in innovation training for enterprise and innovation staff (PA 4) and develop or access training to fill these gaps including for example, Praxis-Unico/AURIL and ARMA courses and accreditations
- In collaboration with other Scottish HEI's, through the outcome 3 national outcome group, we will also look at how innovation training might be further developed which may include:-
 - Chiasma, sand pit and other joint sector based university/business innovation workshops
 - through the sectoral groups, encouraging staff exchange between the university and SMEs (PA 3)

- KTP, Innovation Voucher student placements and other exchange opportunities
- the university will continue to support the implementation and further development of common contracts (PA 7)
- we will continue to make information on university expertise more accessible to business on a sectoral basis (e.g., through web site development)
- in collaboration with other Scottish universities we will also explore what more could be done jointly to increase business access to university expertise
- This is an area where the national outcome group on demand stimulation could potentially assist particularly in awareness raising of the opportunities available to SMEs and micro-companies through working with universities.

Entrepreneurialism (Outcome 4)

During 2018, the university in collaboration with Highlands and Islands Enterprise will develop a business plan for an effective entrepreneurial academy structure, which crosses discipline and regional boundaries. We are exploring the possibility of establishing a distributed 'school of entrepreneurship' with activities aligned to the needs of the developing economy of the Highlands and Islands. This would be located within the academic partners of the University of the Highlands and Islands and involve academics from across the university and associates drawn from the private economic sectors (PA 2), as well as from academic institutions elsewhere in Scotland and from international institutions with capabilities seen as complementary to the aims. The academy, which aims to be operational during 2019, will be charged with ambitious aims:

- To educate and train individuals equipped with the skills necessary to lead and underpin the growth of a knowledge based economy. All students of the university will engage with the entrepreneurial agenda during their studies (PA 1)
- To expose students and staff to the experience of successful entrepreneurs and encourage positive engagement between professionals and business leaders
- To provide direct training, where an identified need is recognised, for professional staff who interact with entrepreneurs and commercial wealth creation (PA 4).

The university organised an entrepreneurship educator development programme in 2017-18, which will be repeated next academic year. 25 academics were trained to become entrepreneurial role models, equipped to drive change in their institutions and surrounding communities (PA 2). The 3-day bootcamp model will be modified next year to include a 1-day session specifically designed for researchers to raise awareness of entrepreneurial opportunities as additional outputs from their research. Moreover, additional sector based entrepreneurship training is also be planned for staff and students.

The university will also lead the Highlands and Islands Business Ideas competition, which is open to all staff and students across the partnership (PA 1), as well as Highlands and Islands businesses and local community groups and individuals. This activity will be funded from the Outcome Grant.

Through the activities described above the university intends to reverse recent declines in KE funding and secure a sustained income exceeding £10million by 2020-21.

The engagement with, for example, SFC innovation vouchers needs to be refined to reflect the nature of the industrial community in the Highlands and Islands. At present, take-up is low and it is anticipated that sector-driven engagement will achieve 10 vouchers in 2018-19 and a rolling expectation of 15 vouchers per annum.

The revised KE network does not assume identical processes for each theme. For example, aquaculture and energy will represent significant resource bearing developments, while other activities might be less intensive. The university will boost the robustness of KE activities through hub and spoke type structures embedded across the partnership and establish more focussed development in areas of immediate strategic opportunity. It is important that KE activity engage with the arts and humanities and the social sciences. The University Research Clusters will be an important aspect of the KE landscape and this link will be strengthened, including investment in joint support for KE and Research. In effect, research and KE will operate with a matrix structure with KE opportunities crossing the research themes, in which the university Research and Knowledge Exchange Committee will act as a guiding body, reporting through formal committee structures, including the academic Council and the Partnership Council.

The University of the Highlands and Islands partnership intends to match the KE spend of the platform grant.

We are also committed to equality of opportunity and non-discrimination in all aspects of our work and study. We accept our obligations to fulfil the statutory requirements relating to equality and diversity and will take steps to eliminate unlawful discrimination, harassment and victimisation; advance equality of opportunity between people from different groups; foster good relations between people from different groups, tackling prejudice and promoting understanding.

The College Innovation Fund will provide opportunities to develop and promote activities at all levels through existing and planned structures and initiatives such as CREATE and the entrepreneurial academy.

Additional UIF funding for 2018-19 - how the uplift in funding will be deployed

Scotland-wide Industry Challenge Innovation Manager

There was a recent RCDG proposal to SFC requesting resources to fund a new "Industry Challenge Innovation Manager" post. This post would have added significant value by building capacity to expand the linkages, improving access to Industrial Strategy Challenge Fund (ISCF) and providing relevant expertise spanning a range of disciplines, technologies, institutions and sectors across Scotland.

The funding for this post was however, not granted. This was not a reflection of the merit of the proposal but was due to additional funding subsequently being approved by SFC, which provided Scottish universities with the resources to jointly fund initiatives, such as this new post, directly.

The proposed post would work proactively with partners to build consortia focused on Scottish key industry sector challenges and accelerate the Scottish university sector's ability to respond to opportunities to lead or collaborate in UK industry/academic consortia (outcome 1, 2 &3 (O1, O2 & O3) PA6).

The post would complement and work in partnership with business development staff within individual universities' and work across all Scottish HEIs with a focus on connecting academic networks across institutions, disciplines, geographies and sectors and to accelerate academic/industry consortium building (focused on ISCF opportunities). This additional resource would also support and leverage building of networks and capabilities across a range of stakeholders including the universities, the Innovation Centres, Scottish research institutes and research pools (OA3, PA10).

Examples of proposed key activities include:

- Forging new "National Partnerships" beyond the scale of individual universities and institutes
- Convening a community of practice to improve communication and sharing of best practice and intelligence across key university professional service staff focussed on ISCF in Scottish universities
- Participation in ISCF engagement workshops and ISCF Challenge-focused events being led by various stakeholders to support collaboration and provide specialist input on the funding mechanisms
- Provide people resources to directly engage and focus on ISCF and increasing connectivity between the Scottish HEI sector, enterprise agencies and Scottish Government with key industry groups and the wider UK innovation landscape KTNs and UKRI.

In light of the ISCF focused new SFC UIF uplift funding, RCDG has revisiting this proposed new function. This included the possibility of pooling a proportion of each universities allocation of UIF funding for 2018-19 to be used for ISCF focused joint initiatives.

This new function is likely to add significant value by building capacity to expand the linkages, improve access to relevant expertise spanning a range of disciplines, technologies, institutions, sectors across Scotland.

Therefore, a proportion of the UHI UIF uplift for 2018-19 funding will be ring fenced for the creation of a proposed jointly funded national Scottish University Industry Innovation Challenge Manager's post that will support the management and coordination of all Scotland-wide Industry Strategy Challenge Fund activities.

UHI Industry Challenge Innovation Resources

The majority of the £260,000 additional UIF allocated to the University of the Highlands and Islands for 2018-19 will be used to resource the creation of a new internal function within the university that will pull together and coordinate our academic partner researchers' contributions towards UKRI and other "grand challenge" proposals and involvement in national consortia building activities.

The function will include a new full time post that will:

- work with external partners to undertake fore-sighting, intelligence gathering and communication and dissemination, focused on key industry sector challenges and sharing activities to spot potential new UKRI etc., calls
- better connect the university into academic networks across institutions, disciplines, geographies and sectors (focused on ISCF opportunities);
 - Providing people resources to directly engage and focus on ISCF and increasing the
 connectivity between the university, the Scottish HEI sector (e.g., via the proposed new
 industry innovation function/resource), enterprise agencies and Scottish Government and
 with key industry groups and the wider UK innovation landscape including the Knowledge
 Transfer Networks (KTNs), SFC Innovation Centres and UKRI.
- identify and bring together relevant grant calls focused UHI teams/groups (O1, O3)
- reach out to lead or join with industry, social enterprises, other universities and research related organisation and the public sector to build grant focused consortia (01, 02, 03, 06, 07, PA10)
- provide support to UHI researchers in the development and drafting of "grand challenge" project grant applications

- in association with the national post/posts, accelerate our (and the university sector's) ability to respond to opportunities to lead or collaborate in UK industry/academic consortia (O3)
- increase our involvement in, and the number of, high quality multi-partner bids for grand challenge and other UKRI funding
- increase the success rate of UKRI funding for UHI and other Scottish universities
- in partnership with regional and national partners, develop mechanisms to influence UKRI ISCF future calls.

This new university function will also require the part-time secondment of 'champion' academic leads from one of the four research cluster groups:

- The Institute of Health Research and Innovation (HRI)
- Marine, Environmental Science and Engineering (MESE)
- Humanities and the Art Research Cluster (HARC)
- Society, Identity, Landscape and Knowledge (SILK)

Some budget will also be required to support the university's representation in consortia building/grant proposal development meetings and to facilitate the connecting and pulling together of what is often in our case, a very geographically disparate group of individuals.

The aim is therefore to use the university's allocation of the 2018-19 UIF uplift to drive up the number and quality of multi-stakeholder/multi-university ISCF project applications aligned to key Scottish and UK industry challenges. A key metric will therefore be the increased levels of participation in ISCF bids.

Success will ultimately be measured by the increase in the amount of ISCF funding leveraged for the university and indeed for Scotland.

The proposed new post and plans will complement existing UIF funded activities by helping to build relationships between universities, industry and other stakeholders both at institutional and collaborative level. This will in turn help to deliver on all of the UIF outcomes.