

Knowledge Exchange and Innovation (KE&I) consultation- update and next steps

- To update Committee on the responses and next steps from the [KE&I consultation](#)
- To seek Committee advice on some specific areas of focus ahead of our update to SFC Board (24 June)

Recommendations

RKEC is invited to:

- Note the responses to KE&I consultation and next steps.
- Offer advice on developing plans particularly relating to the Entrepreneurial Campus Strategy, Infrastructure investment process and university and college Knowledge Exchange and Innovation Fund (KEIF).
- Provide comment on our direction of travel, areas of synergy and the opportunities brought by the changing landscape.

Financial implications

- No direct financial implications. However, key aspects of implementation will require additional resource such as the ambitions within the Entrepreneurial Campus Strategy and college capacity funding for KE&I.
- At time of writing we understand that the Scottish Government plans to publish their high level Spending Review which may only allow us (SFC) to understand total budget.

Knowledge Exchange and Innovation (KE&I) Consultation – update on responses and next steps

Purpose

1. This paper updates the Committee on the responses we received to our KE&I consultation and asks for views and comments on how we are using that evidence base to continue to co-design our support for KE&I, recognising the wider context (Spending Review, SFC Review implementation, SG Innovation Strategy, NSET, UKRI etc.)

Background

2. At its 24 February 2022 meeting, the Committee received an update (RKEC/22/06) on our then pending [KE&I consultation](#). This consultation follows the SFC Review and builds on its recommendations for change. It describes SFC’s proposed system for supporting college and university knowledge exchange and innovation, engagement with UK KE&I system and the Entrepreneurial Campus Strategy which is aligned with the [Scottish Tech Ecosystem Review](#) (STER) recommendations related to post-16 education and the [National Strategy for Economic Transformation \(NSET\)](#). It is also an opportunity to embed equality, diversity and inclusion (EDI) throughout.
3. The Review recommends we “... centre our knowledge exchange and innovation support on the top priorities of a green recovery, a well-being economy and transition to a net-zero carbon society.”
4. It also stresses the importance of positioning our investments strategically closer to both colleges and universities - representing more of a co-owned strategy.
5. To support this aim we committed to developing policy in five key areas:
 - Creating the Knowledge Exchange and Innovation Fund (KEIF), as our core funding in support of University and College capacity and strategy for KE&I.
 - Relaunching our flagship investments as University and College KE&I “stable long-term infrastructure”
 - Co-designing the Entrepreneurial Campus concept with colleges and universities.
 - Developing mission-oriented research and knowledge exchange themes.

- Establishing a university and college KE&I advisory function
6. As shown in the diagram at Annex A¹, these form a SFC supported system of inter-dependencies, a system that must also enable our institutions to leverage in UK Research and Innovation (UKRI) and other funding. We have been determined to work in partnership with universities, colleges and key stakeholders to co-design this system so it lives and breathes as a shared strategy.

Consultation Analysis

- We received 53 responses from universities, colleges, Innovation Centres, Interface, Enterprise Agencies and others.
 - There was overwhelming support for the approach we are taking in co-designing the system and for ensuring it is outcome led – recognising the diversity of our institutions and value they can bring to system.
 - There was strong encouragement and support for ensuring alignment with NSET, SG’s forthcoming Innovation Strategy (and others) including further exploration of a mission-based approach.
 - There was strong support for embedding EDI across proposed system.
 - There was a very strong message that resource is required to deliver on Review particularly in college capacity funding and the Entrepreneurial Campus Strategy.
7. Further analysis on each of the five sections is available at Annex C.

Forward Look

8. We want to continue working in partnership with Scotland’s universities, colleges and key stakeholders to co-design and co-own a coherent, collaborative framework that lives and breathes as a shared strategy, focussed on improving people’s lives and changing the world for the better.
9. The SFC supported KE&I system/strategy should enable, incentivise and inspire our institutions to help drive Scotland’s future economic and social prosperity, and our ultimate goal is to build a net-zero green economy and society.
10. In AY23/24 we want to see a renewed, more cohesive KE&I system supported

¹ The diagram at Annex A sets out SFC’s proposed system for supporting college and university KE&I activity and engagement with the UK KE&I system. This diagram is not perfect but it serves as a useful reference point for how specific aspects of the system hang together to form a coherent system. We will continue to refine this as we develop the system.

and driven by the University and College KEIF, long term stable infrastructure investments (ICs and Interface) and a maturing Entrepreneurial Campus Strategy. We will agree (over AY22/23) outcomes to be delivered and supported by this system which will form part of a coherent, collaborative framework.

University and College Knowledge Exchange and Innovation Fund

11. The Review sets out the importance of underpinning support for KE&I in our universities and colleges. We said we would create the KEIF, comprising the separate streams of College KEIF (a new funding stream) and University KEIF (evolution of the current University Innovation Fund), as our core funding in support of University and College capacity and strategy for KE&I.
12. The Review recommends we create KEIF (evolving current University Innovation Fund £15.3m p.a.) as our core funding in support of university capacity and strategy for KE&I. We are deliberately broadening to Knowledge Exchange and Innovation reflecting the diversity of our institutions and ways in which they work with businesses and communities. We need to ensure we have right mechanisms in place to allow KEIF to deliver on renewed purpose (green recovery, wellbeing economy, just transition to Net Zero).
13. There was strong support for our plans to evolve UIF (to KEIF) building on success of outcomes approach and recognising the diversity of our institutions. There was recognition of the importance in ensuring coherence with other parts of KE&I system and the role KEIF can have in supporting individual and collaborative efforts to deliver on ambitions.
14. We will spend AY22/23 co-designing KEIF ensuring the right mechanisms are in place to ensure the University KEIF delivers against its renewed purpose. This will include how we fully embed equality, diversity and inclusion and what role the KE Concordat can have in our system. We will work with universities (and others) to agree outcomes which we can align with SFC's wider Review plans. For this upcoming AY22/23 we will update UIF guidance to better reflect policy priorities (net zero, wellbeing and entrepreneurial economy). Completion of the SFC KE metric return and the HESA Higher Education Business Community Interaction Survey will remain a condition of grant.

College KEIF

15. Following two successful rounds of the College Innovation Fund (pilot) our Review recommended that a baseline for an underpinning College KEIF should be established. Where the pilot was project based the proposed College KEIF is intended, as informed by the evidence to our Review, to contribute to long-

term college capacity for KE&I. By capacity we are referring to people and the infrastructure colleges will require to effectively work with businesses, public and third sector organisations and to win or leverage funding into KE&I activity.

16. This is a significant next step for our College KE&I strategy and we propose to build it in a measured way, from AY2023/24 at the earliest. We need to understand what timescale of first cycle we should put in place for College KEIF before we review it and establish a mature model for future years.
17. Responses to our consultation were very supportive of our plans for college KEIF particularly highlighting the unique strengths and value colleges bring recognising their distinction from universities as well as their complementarity in an integrated system.
18. We plan to work very closely with colleges over next AY to fully develop college capacity support to begin in AY23/24. This will include agreeing outcomes to drive and incentivise this funding. We will co-design considering diversity of college specialisms, place and readiness levels. We will also consider possible funding allocation model, scope of any collaborative activity and a measurement framework.
19. It should be noted that no budget is in place at this stage and that any future budget will be subject to the availability of funds, post spending review.

Long term stable Infrastructure investments (Innovation Centres, Interface)

20. Review recommends we reposition ICs as 'infrastructure', strengthening their (and Interface's) relationships with colleges and universities bringing them 'strategically closer' and that we consider potential opportunity areas in the model and provision.
21. We heard strong support for 'repositioning' into a more cohesion and integrated KE&I system recognising today's landscape and strategic need to ensure we had the correct provision of ICs. There was also strong support for alignment with NSET and the Scottish Government's forthcoming Innovation Strategy.
22. There was very clear support for ensuring additionality, flexibility, responsiveness and industry demand focus whilst recognising that ICs and universities and colleges can be strategically closer in how they broaden and deepen their understanding of university and college offering and how they can help maximise impact. A clear role in leveraging additional funding to Scotland was highlighted.
23. We set out our suggested minimum criteria (Annex D) for what an

'infrastructure' IC would need to do or embody which has not been challenged through the consultation. We now need to turn that and our wider considerations of a coherent, collaborative KE&I framework into a practical and succinct process for determining which ICs we will support over the long term. The wider context for this is critical, particularly the developing Innovation Strategy which will be published end of August.

24. Committee views on how best to design a succinct SFC process for establishing future IC provision would be welcome, recognising the need for wider, strategic view as well as ensuring robust test to earn longer term SFC support. Views on what role RKEC and SFC Board should have in such a process also welcome.

Interface

25. The consultation was generally very supportive of long term stability for Interface recognising their value to SME base. There was clear advice on the need for better alignment of support with ICs and enterprise agencies. Some practical suggestions on improvements and efficiencies were offered in order to move away from 'process-led' and quantity over quality as well as digital advances and better feedback loops to academics.
26. A major potential area for Interface focus and dedicated resource is in how they work with colleges, whilst this is linked to college capacity funding there is also a need to evolve from within current resource to better recognise college role and offer opportunities on a par with universities rather than in the absence of a university partner.
27. We will continue to develop and co-design overall coherent, collaborative framework with universities and colleges and will invite Interface to submit a long term plan to be consider (as key part of system) in AY22/23. This new arrangement will need to begin in AY22/23.

Entrepreneurial Campus Strategy (ECS)

28. Review recommended an ECS to set out our ambitions to work with colleges and universities to enhance entrepreneurship and entrepreneurial activity that will be of significant benefit to Scotland's economy and society. We said we would rapidly co-own and co-design an ECS with universities and colleges building on existing successful activity with ambition to dramatically increase the flow of entrepreneurs. We aim to establish a quality threshold of provision ensuring every student has opportunity to access an entrepreneurial education.
29. Our plans for ECS were very well received by sector recognising the opportunity for greater coherence to a fragmented area. The significance of this strategy is

clear in its relation to STER and NSET's 'Entrepreneurial People and Culture' programme.

30. Key message from consultation is that resource is required to develop strategy in terms of staff time and general support. We were advised to manage 'entrepreneurship' and 'entrepreneurial education' separately and there was strong support for ensuring access to expertise such as 'Entrepreneurs in Residence', mentors and commercial champions with a pan-Scotland approach suggested. There was also support for better utilisation of current assets.
31. We have been working closely with the Enterprise Support Group which are a subgroup of Universities Scotland's Research and Commercialisation Director's Group on a workplan which has developed well and quickly building on enthusiasm, goodwill and a clear willingness to co-design. The ESG have already developed costed plans to deliver on parts of this agenda and we have prepared an update for STER Advisory Group which sets out 4 draft work packages (Annex E). Which we have been discussing with universities and colleges.
32. Committee may wish to comment on developing plans, recognising the obvious enthusiasm in universities and colleges in the context of a difficult spending review outcome.

Mission-orientated R&KE themes

33. Review highlights the opportunity of universities and colleges to tackle large scale challenge areas of current and future need for Scotland. SG supportive of our arguments. Missions approach puts R&I at heart at achieving goals subject to significant and sustained funding focused on longer term outcomes.
34. There was widespread support for SFC adopting a mission-oriented approach recognising the galvanising role that SFC can play. We will continue to explore our thinking particularly in context of spending review and shared goals we can set for KE&I system.

KE&I Advisory Function

35. We have set out a system in partnership with universities and colleges, we need to make sure our support is configured and supported optimally. Advisory Board could help that concept recognising more of a co-owned strategy.
36. We heard agreement that clarity of role and function is crucial in relation to other parts of system without duplication of other governance arrangements. There is potential for a KE&I Advisory Board to bring together different parts of system ensuring alignment and deliver of shared goals. We continue to support

the development of SG's Innovation Strategy and ensure our thinking here aligns.

Next Steps

37. June, July 2022

- Agree and publish renewed guidance to support UIF delivery in AY22/23, better reflecting policy priorities (green recovery, wellbeing, Net Zero to Just Transition, entrepreneurial campus strategy) in line with interim Outcome Agreement arrangements.
- Continue to co-design Entrepreneurial Campus Strategy with universities and colleges, beginning 1 Aug 2022.
- Renew Innovation Voucher funding and consider pilot devolving decisions and reporting to Interface in order to better support and measure outcomes
- Publish Innovation Centre infrastructure criteria and process timeline.
- SFC Board to consider KE&I implementation plans and progress and to take a decision on aligning IC Phase 2 end dates to enable a single strategic process on future support (this amounts to 1 year costed extension to CENSIS and IBio which ensures the maintain delivery and staff whilst we make long term decisions).
- Board to be updated on resource required to support Entrepreneurial Campus Strategy from AY22/23, College capacity development plans (funding from AY23/24).

Timeline

38. Now and in AY22/23

- Spending Review concludes (May/June)
- SFC new Strategic Framework (AY22-25)
- SG Innovation Strategy published (end of August 2022)
- Continue to co-design and co-develop university and college Knowledge Exchange and Innovation Fund (KEIF)
- Continue to co-develop and deliver Entrepreneurial Campus Strategy (ECS)
- Continue to co-design coherent, collaborative, outcomes framework for

all parts of system.

- Conclude infrastructure funding processes (no later than March 2023).

39. To begin 1 August 2023

- SG's 'Purpose and principles for universities and colleges' published (May 2023)
- SFC's National Impact Framework and Accountability Framework
- New IC infrastructure arrangement, new Interface infrastructure arrangement (as part of coherent, collaborative outcomes framework)
- College and university KEIF (as part of coherent, collaborative outcomes framework)
- Entrepreneurial Campus Strategy second year (as part of coherent, collaborative outcomes framework).

Risk assessment

40. Risk in not supporting KE&I implementation plans as part of one of the key priority areas highlighted in Scottish Government's response to our Review. Significant risk for full implementation if additional resource is not available.

Equality and diversity assessment

41. We are seeking to embed equality, diversity and inclusion in our strategy for KE&I; building on current good practice, identifying opportunities to advance equality and build a truly inclusive system – this is a priority if we are to deliver on economic and societal goals.
42. We have very clearly set out our commitment to EDI across our KE&I system within consultation document and have asked respondents to consider their responses to the questions through the lens of equality, diversity and inclusion and explain any risks or opportunities in their submission. Responses will help shape any changes to be adopted.

Recommendations

43. RKEC is invited to:

- Note the responses to KE&I consultation and next steps.
- Offer advice on developing plans particularly relating to Entrepreneurial Campus Strategy, Infrastructure investment process and university and college KEIF.

- Provide comment on our direction of travel, areas of synergy and the opportunities brought by the changing landscape.

Financial implications

44. No direct financial implications. However, key aspects of implementation will require additional resource such as the ambitions within the Entrepreneurial Campus Strategy and college capacity funding for KE&I.
45. At time of writing we understand that the Scottish Government plans to publish their high level spending review which may only allow us (SFC) to understand total budget.

Publication

46. This paper will be published on the SFC website.

Further information

47. Contact: Gary Bannon, Assistant Director, Research and Innovation

Annex A Diagram-one – SFC’s proposed system for supporting college and university KE and Innovation and the Entrepreneurial Campus

Purpose

SFC wishes to “...centre its knowledge exchange and innovation support on the top priorities of a green recovery, a well-being economy and transition to a net-zero carbon society.” SFC Review, phase-three report

Governance, good practice and measurement

KE&I Advisory Board: providing strategic oversight of and guidance on overall system performance
SFC National Impact Framework
Metrics and indicators: including HESA HEBCI
HE Knowledge Exchange Concordat

Measurable Outputs and Outcomes

*successful spin-outs and start-ups / *companies supported to innovate and scale / *adoption of solutions / *income / * net-zero metrics / *E&D data / * entrepreneurial graduates (all levels) / *feedback loops to teaching and research / *KTPs

KE&I Activity (private and public sectors)

*licensing / *CPD / *collaborative R&D&I projects / *training / *incubators / *consultancy / *entrepreneurs in residence (EC) / *events / *collaborative networks / *KTP

Equality, diversity and inclusion

We recognise the important role that our support for knowledge exchange and innovation can play in advancing equality, diversity and inclusion. Consideration of equality across our knowledge exchange and innovation portfolio is a priority if we are to succeed in delivering economic and societal goals.

Missions, Leverage and Measurable (beyond the SFC the wider UK system (particularly UKRI) and commercial activity (incl. venture capital)) - Colleges and universities must win/leverage funding from **Income contribution)** -

Missions Via SFC and other leveraged UK funding: collaborations of the willing focused on long-term solutions to our biggest problems

INFRASTRUCTURE

Innovation Centres

Build opportunities of scale
 Leverage funding
 Foster collaborations
 Translate industry, sector, technology etc. challenges and priorities into collaborative solutions with colleges and universities.

College and university KE&I and E&E capacity, strategy and good practice

Our colleges and universities have the resources, capacity and incentives to support effective strategies for KE&I and Enterprise and Entrepreneurship. SFC’s funding also supports the environment for responsible and inclusive practice.

INFRASTRUCTURE

Interface

Stimulate demand and simplify access to college and university KE&I with particular focus on SMEs – supported by the SFC Innovation Vouchers, connecting SMEs with academia for the first time, leading to sustained relationships. Promotion and celebrating the KE&I of our colleges and universities. Supporting the KE&I system to maximise their contributions to agreed outcomes.

College KE&I Fund (College KEIF)

University KE&I Fund (University KEIF)

Entrepreneurial Campus Strategy

Including Converge Challenge, Bridge 2 Business and the Scottish University Scale-up Consortium.

Scottish University Research Base

Annex B

Summary of R&I Review recommendations

The overarching strategic goal behind the Review's recommendations is to increase and demonstrate the value of Scottish research. The R&I recommendations are summarised –

- Continue to protect discovery research and maintain our current concentration of funding, supporting research excellence wherever it is found;
- Introduce reporting for our block grant research investment and sharing good practice and case studies as we develop a new and up to date narrative about the value of research;
- Work with the sector to develop a blueprint for establishing a positive research culture in Scotland;
- Better support the postgraduate research student experience, including through changes to our Research Postgraduate Grant and consolidating our current support for national graduate schools;
- Recommission Research Pools, creating next generation networks with a focus on challenge-oriented research collaboration, leveraging additional funding and fostering early career researcher communities and training;
- **Develop mission-oriented research and knowledge exchange themes and funding;**
- Boost our partnership working with UKRI, including by creating an SFC position to be based in Scotland House, London;
- **Relaunch flagship knowledge exchange investments (Interface and Innovation Centres);**
- **Create core college knowledge exchange and innovation funding and re-developed core university knowledge exchange and innovation funding;**
- **Take forward an Entrepreneurial Campus strategy; and**
- **Develop a KE&I Advisory Board to oversee our investments in collaboration with institutions.**

In recognition of the interconnectedness of this area, SG has indicated that the progression of R&I recommendations as a combined 'package' is a priority, and that implementation should be taken forward holistically.

Annex C

University Knowledge Exchange and Innovation Fund (KEIF)

- Universities supportive of UIF approach and of need to evolve to reflect current policy priorities (particularly NSET and NZ) – will update UIF with renewed outcomes for AY22/23 further co-designing KEIF to begin AY23/24.
- Clear understanding of role of universities (and colleges) as agents of change to drive Scotland’s future economic and social prosperity.
- Evolved UIF/University KEIF must recognise plurality and diversity of HEIs and provide a degree of flexibility that allows universities to respond to priorities by concentrating their efforts on activities where they will have most impact. Importance of ‘place’ highlighted.
- Strong desire to work at an individual and collaborative level to deliver on ambitions – NZ green economy and society through KEIF.
- Strong support and expectation that University KEIF should coherently link with other parts of KE&I system (infrastructure). Duplication and complexity to be avoided to maximise resource and deliver on shared goals.
- Strong advocacy for increase in funding and multi-year cycles in order to deliver on SFC and SG ambitions – many specifically calling for increase in Platform Grant element to better enhance capacity.
- Clear call for a more strategic and purposeful approach to collaborative activity to be adopted with some calls for this activity to be incentivised or it could become ad hoc and lack clarity of purpose.
- Strong message that metrics are relevant and provide useful data, however, they have their limitations as indicators of quality and can lead to ‘game playing’. The ranking and hierarchy that can result from metrics could be a barrier to meaningful collaboration. Focus on continuous improvement and other opportunities to demonstrate performance suggested.
- Widespread recognition that KEC was complementary to University KEIF and has a place within KE&I system – some highlighted KEC role in supporting delivery of EDI as well as ‘people and culture’ ambitions.
- Development of an innovation ecosystem with an increased focus on college activity and SMEs was widely welcomed. Some advocated an integrated system level approach at regional scale rather than the potentially siloed approach that separate consideration of University KEIF, College KEIF, etc. suggests.

College KEIF

- Our joined up approach and plans for a single narrative for university and college KEIF were greatly welcomed.
- Strong support for the role colleges play in 'place' agenda and within their regional economies.
- Many highlight the unique strengths and value colleges bring recognising their distinction from universities as well as their complementarity in an integrated system.
- Very strong message from colleges that significant resource is required to enable them to play the vital role in system as described both in terms of capacity funding to support KE&I within and between colleges and universities but also to allow them to engage fully with our KE&I infrastructure to respond to opportunities and play a full role in the system.
- There is a real risk that failure to act on this recommendation (creating the College KEIF from AY23/24 by ensuring additional resource is made available) will signal a major lost opportunity and failure in our Review implementation plans.

Long term stable infrastructure investments (ICs and Interface, IVs)

- Strong support for 'repositioning' and taking a strategic approach to current provision of ICs recognising today's landscape and Scotland's needs (NSET, future and global market opportunities, NPF, SDGs, Growth Deals, SG Innovation Strategy, UKRI etc.). Do not 'fossilise IC provision'.
- Long term stability approach 'very welcome' as it will ensure ICs are 'more effective and impactful'. Not KPI driven but 'must be about long-term goals'.
- Many welcomed explicit focus on 'key mission priorities and outcomes' describing ICs as 'strategic linchpin at intersection of government policy, academic capability and industry transformation'.
- SG Innovation Strategy is seen as a major opportunity to ensure effective alignment and use of different supporting elements of our KE&I base. Some highlight that ICs must be recognised in strategy and should be funded to leverage support on a co-ordinated level, aiding strategic alignment and reducing duplication.
- Strong support for re-positioning to more cohesive and integrated KE&I system and for ICs to explicitly be tasked with providing scalable opportunities, facilitating and leading collaborations between universities (and colleges) with external organisations. One described it as 'opportunity to mobilise ICs as more effective strategic assets for Scotland'.
- Many institutions felt that ICs could be more proactive in broadening and deepening their understanding of what each university and college can offer

in order to act as better translational organisations helping them maximise their impact. They also recognise the role of universities and colleges in engaging and 'showcasing' to ICs.

- Strong message that colleges must be supported through capacity funding to engage and respond to opportunities brought by ICs and that ICs must be accessible to all with skills development done in partnership with regional college. ICs to form part of curricular development process and particularly in creation of micro-credential programme.
- There was support for the recognition that ICs should show real commitment to delivering and developing Scotland's wellbeing economy as well as for involving communities directly in strategic thinking.
- Additionality, flexibility and retaining industry focus also highlighted by many.
- ICs as catalysts in the innovation of future skills development in industry.

Interface

- Generally supportive of long-term stability, recognising value particularly with SME base – principal challenge in securing greater alignment which will simplify access for SMEs to range of support. Some asked whether Interface could be developed as a single 'front door'.
- Support for overall alignment with ICs and Enterprise Agencies to provide 'stronger integrated network' and to ensure initial momentum can follow through to other funding routes.
- Sharing of opportunities 'very process-led' not aligning to drivers of many academics – could improve response rates by helping academics understand the difference they could make by engaging with smaller organisations.
- Currently 'very focused on number of enquiries generated rather than quality of proposals'
- Current system/model would benefit from digital upgrades and investment in a portal to manage activity (automatic tracking, reporting across stakeholders).
- Improve feedback loop to academics.
- Some suggested adoption of shared innovation outcomes framework to incentivise and strengthen partnership working.
- Quality engagements over quantity as about enabling long term and valuable relationships.
- Interface could focus on under-represented themes (not covered by ICs). Stimulate innovation within ecosystem.
- Reverse Interface helping academics find business partners.
- Colleges all stressed the importance of dedicated resource to allow them to work with Interface.
- Colleges highlighted a 'lack of parity of engagement and resources devoted' by Interface and strongly suggested Interface need to evolve to support them

and develop a better understanding of the unique and diverse capabilities colleges have on par with universities rather than in absence of university support.

Innovation Vouchers

- Increase value of IV and increase availability of advanced innovation vouchers.
- Broaden scope of vouchers beyond 'innovation' to better align with societal impacts and the NPF.
- Recognise the potential links to the Entrepreneurial Campus Strategy in generating more applicants and its impact on available funds.
- Introduce a stage-gate process to attract multi-interdisciplinary partnerships throughout the IV lifecycle and to address the issue with IV short termism.
- A college KEIF would reduce barriers for colleges to fully participate in the IV process.
- Develop a digital solution that works for both sectors, or for either sector and agree the right data collection that can deliver positive changes and feedback.
- There is a tension between college/business innovation and university/industry innovation by definition and the distinctive profile of each – however both is an accurate definition in its own right. This should be reflected in any changes.
- Each sector understands knowledge exchange differently – HE as a subset of innovation and FE as an activity as a result of innovation and in a linear fashion. This should be taken into account.

Entrepreneurial Campus Strategy (ECS)

- ECS was considered 'very welcome' recognising opportunity for greater coherence to a fragmented area. It was also considered 'opportune' reflecting increased focus on entrepreneurship (STER, NSET etc.)
- Key message coming through responses is that of resource required to develop strategy – staff time and more general support. E&E not always considered a priority action. Culture change to make a priority sustained through capacity to deliver, long enough to embed new approaches.
- Many felt more could be done with existing capacity but cautioned on 'spreading too thin'.
- Helpful advice on defining 'entrepreneurship' and 'entrepreneurial education' with suggestion they could be more effectively managed separately.
- Many agreed that creating a baseline will be challenging - one size does not fit all, differing starting points. Co-creation required. Starting point for what good looks like.
- Colleges very clear that they need resource/capacity to enable a baseline of support and reach this threshold

- Strong support for need to ‘access expertise’ such ‘Entrepreneurs in Residence’, mentors, commercial champions. Seen as ‘critical requirement’ as they bring ‘significant value’. Pan-Scotland approach suggested, a programme of support rather than individual basis. Resource to buy time of individuals needed.
- Strong support for better utilisation of current assets (Converge, Bridge 2 Business, Entrepreneurial Scotland) with suggestions for adaption, extra resource and collaboration as a vehicle to help fulfil strategy. Tertiary approach for all was highlighted. Worth noting no desire to recreate SIE and not a single mention of Student Enterprise Scotland proposal.
- Curriculum redesign and access to education another key strand with many identifying the need for incubator facilities. Infrastructure element seen as so important in how EC manifests on campus.

Mission-orientated R&KE themes

Review highlights the opportunity of universities and colleges to tackle large scale challenge areas of current and future need for Scotland. SG supportive of our arguments. Missions approach puts R&I at heart at achieving goals subject to significant and sustained funding focused on longer term outcomes.

- There was widespread support for SFC in adopting a mission-oriented approach, recognising the galvanising role that SFC can play and our unique ability to foster cross-institutional collaboration.
- There was wide agreement on looking to the NSET and the SDGs/NPF as source of mission areas and that prioritisation as well as a long-term view is important for clarity of focus.
- In general, three approaches to how a ‘missions’ approach could be adopted by SFC were suggested –
 - Taking a bold, multi-faceted approach with substantial new resource and alignment with other SG levers including procurement and investment capital;
 - Working through our routes and channels with additional resources to drive a mission-focus; and
 - Building in focus in through what is expected of institutions, for example through Outcome Agreements, with an approach that would not necessarily require new funding.
- There was some overlap with the aims of the Alliance Research Challenges (ARCs); a number of submissions highlighted a role for SFC in galvanising cross-sector collaboration with a focus on leveraging additional investment to progress key mission areas.

Colleges were united in outlining the role that they can play, with many underscoring the need for underpinning capacity support to enable their full involvement in any missions approach.

- Many universities highlighted the importance of involving a broad range of institutions and an inclusive approach.
- It was suggested that SFC should ensure that activities on future research collaborations, KE&I, and regional skills provision are joined up as progressing these separately could result in siloed action and inefficient use of scarce resources.

KE&I Advisory Function

- Agreement that clarity of role and function crucial in relation to other parts of the system without duplicating other groups/governance arrangements.
- Potential for Advisor Board to bring together different parts of the system – role in achieving greater integration and coherence and alignment of goals. Some called for primary function to be to ensure ‘system alignment with mission focused goals’.
- Advisory Board could provide strategic guidance in areas of high value/high growth potential.
- Some suggested Board could play practical role in reviewing action plans, determining funding allocations, undertaking annual reviews and making decisions on funding for new initiatives to accelerate delivery of outcomes.
- Membership and inclusive of whole system highlighted (universities, colleges, ICs, Interface, Enterprise Agencies, local govt., UK and international etc.).
- Alignment governance relationship to NSET Delivery Board key.

Annex D

Extract from KE&I consultation – IC proposed criteria

We will run a process to determine long term infrastructure investments in AY22-23.

As a minimum to qualify as an SFC ‘infrastructure’ investment an IC must do or embody the following:

- Be focused on using all SFC funding in utilising and connecting the existing strengths of our universities and colleges with businesses². We will move our emphasis from KPI measures to delivery on agreed outcomes and we will deliberately relaunch purpose with a broader KE remit in order to reflect the diversity of our institutions and the value they can bring. An infrastructure investment must recognise this and adapt accordingly.
- Be strategically aligned to the needs of Scotland today particularly in the context of recovery, Brexit and net-zero. We will agree outcomes in pursuit of green recovery, wellbeing, a just transition and an entrepreneurial economy. For an IC to be supported over the long term it must be clear that they are playing/can play an integral role in delivery of national strategies and priorities. It would be unnecessarily limiting if the role of an IC remained rigid and single focused so we will expect ICs as long-term investments to have a broader and highly collaborative remit.
- Strategic alignment is required to ensure we do not duplicate efforts or clutter support and the landscape. It is also vital in enabling an IC as an infrastructure investment to demonstrate that they are bringing real value to the system beyond the impact an individual organisation or even a partnership of institutions or organisations could have themselves. An infrastructure investment must demonstrate that they can play a significant role in helping Scotland leverage in UK, EU and other sources of R&D support. They are vital to the system in connecting and building opportunities of scale for Scotland.
- An IC as an infrastructure investment must be fully part of the university and college KE&I system whilst maintaining and demonstrating significant industry demand. ICs as infrastructure will exist to help universities and colleges maximise their value to Scotland (through their KE&I) so ICs’ relationships with universities and colleges must be strengthened collectively and individually. We will look to universities and colleges to help us co-own and co-design that support.

² Where ‘businesses’ here is to be read at including private sector, third sector and public sector organisations, notably the Scottish NHS and Social Care system.

Annex E

Entrepreneurial Campus – Draft Work Packages

Work Package 1 – Embedding Entrepreneurship in the Curriculum

- WP1.1 Entrepreneurship Education Toolkit
- WP1.2 Curriculum Pathfinders

Work Package 2 – Increased Start-up and Spinout formation and growth

- WP2.1 Entrepreneurs in Residence and Student Ambassadors
 - 2.1.1 Entrepreneurs in Residence
 - 2.1.2 Student Ambassadors
- WP2.2 Seed funding and grants (previously microfinance)
- WP2.3 Spinout and Company Growth Mentors and Commercial Champions
- WP2.4 Expand Converge to Colleges
- WP2.5 Shared Incubation Facilities

Work Package 3 – Establishing a quality threshold (previously baseline) and sector targets

- WP3.1 University quality threshold and targets
- WP3.2 College quality threshold and targets

Work Package 4 – Governance, accountability and dissemination

- WP4.1 Governance and Advisory Group
- WP4.2 State of the Nation report and celebration event

Work Package 1 – Embedding Entrepreneurship in the Curriculum

WP1.1 – Entrepreneurship Education Toolkit

We will work with the sector to bring together a toolkit of best practice that demonstrates how to effectively deliver entrepreneurship in the curriculum. The majority of this will be built from resources and existing capability, already available in institutions. This will enable institutions with less capacity to pick up pre-existing methods and for institutions that are further ahead to seek to expand provision into new discipline areas.

Timing:

- Y1 (AY22/23) – development of the toolkit, including pulling together best practice materials, creation of new guidance, approvals to share content between institutions.
- Y2 (AY23/24) – initial deployment of toolkit. Ambition for institutions to rollout a new form of entrepreneurial provision in new discipline areas and increase uptake of overall entrepreneurial education students.
- Y3 (AY24/25) – Wider expansion of course availability and new disciplines accessing entrepreneurial education. Increasingly the norm that entrepreneurship is embedded in all student's education

Outcome: Significant increase in the numbers of students receiving an education that will support the development of an entrepreneurial mindset. A much larger pipeline of students who are likely to go on to start businesses, are more likely to join start-ups and new ventures and understand the broader approach to entrepreneurship that will deliver enhanced career opportunities.

WP1.2 – Curriculum Pathfinders

Complementary to WP1.1 we will develop curriculum pathfinders in subject disciplines where there are high potential opportunities to grow entrepreneurship, aligned to Scottish Government priorities.

This will require ongoing co-creation with the sector to determine the appropriate disciplines but could be built on the 'new market opportunities' listed in NSET. This will seek to embed entrepreneurship in education areas where there is significant economic potential and where creation of new businesses and pipeline of skilled workforce is critical to Scotland's longer term economic performance.

Timing

- Y1 (AY22/23) – Q1/Q2 identify discipline(s) for development. Q3/Q4 bring together practitioners in disciplines and entrepreneurial education, including

businesses and support orgs in each discipline to create new education and training materials including upskilling of course providers.

- Y2 (AY23/24) Initial rollout of course provision to cohort of students
- Y3 (AY24/25) Continued delivery of courses with consideration of further opportunities for development and types of provision

Outcome: Increased pipeline of entrepreneurial students with a specific focus on key economic opportunities. Increased number of start-ups being generated in these discipline areas. Closer working with academia and industry to generate high performing graduates. Increased opportunities for integration through placements, internships and dissertation projects.

Work Package 2 – Increased Start-up and Spinout formation and growth

WP2.1 – Entrepreneurs in Residence and Student Ambassadors

2.1.1 Entrepreneurs in Residence

We will create a new model of Entrepreneurs in Residence (EiR) to create a shared expertise available to all universities and colleges.

Our consultation highlighted the significant benefit that EiRs can make to the stimulation and initiation of new start-ups and spinouts by providing early-stage advice and support to entrepreneurs. Currently there is no centrally managed structure to identify and recruit EiRs and subsequently availability and coverage is patchy. We therefore propose a new approach which ensures every university and college has access to at least one EiR. To ensure access and recognising regional variation, this could be done on an institutional basis or on a regional basis with multiple institutions accessing a shared resource. We could also consider this from a discipline perspective with an EiR with a particular industry background working with multiple institutions. EiRs will also provide a first point of contact for academics and staff considering starting a business, whether start-up or spinout. SFC has previously trained a cohort of entrepreneurs to gain skills towards becoming EiRs focussed on scale-up development, run by a consortium of 16 universities. We could utilise some of this existing capability to provide training and support to new EiRs.

2.1.2 – Student Ambassadors

We will recruit cohorts of student ambassadors provide an ‘on-the-ground’ resource to work with their peers, raising awareness and helping to generate opportunities in the student population.

Ambassadors act as an important early-stage intervention and will likely be the very first interaction a potential student entrepreneur has with the wider entrepreneurial ecosystem. Getting more students involved with the entrepreneurship activities

taking place in universities and colleges is critical to pipeline development and many will then go on to benefit from the advice and support of EiRs as their ideas mature.

Timing

- Y1 (AY22/23) – finalise scope of EiR approach and identify number to recruit (subject to funding). Adapt existing training for EiRs with universities. Launch public recruitment campaign, with focus on diversity and train successful applicants to ensure new EiRs it the ground running. Student ambassadors to be recruited within institutions and receive training to begin immediately.
- Y2 (AY23/24) – run further recruitment campaign to account for drop-off and churn. Reflect with sector on approach and consider opportunities to iterate.
- Y3 (AY24/25) – implement any changes and consider wider sustainability planning/opportunities for programme expansion.

Outcomes

Demand stimulation to engage the student population with the entrepreneurial activities being undertaken in their institutions. High quality trained and assured advice from EiRs with access across all of Scotland and at every institution. This will raise the volume and quality of student and academic start-ups and spinouts being formed. Ongoing training of EiRs will continue to bridge academia and industry, directing greater industry experience into universities and colleges.

WP2.2 – Seed funding and grants (previously microfinance)

We will fund a programme of seed funding to directly enable students to start businesses. This will have a particular focus on inclusion to ensure any student from any background, with the support of a small amount of finance, can make the leap from an idea to a business. We understand the transformative effect a small amount of funding (circa £500-£1000) can make in shaping the direction of an individual's life. This funding will allow students to create their first business by providing the necessary funds to cover initial start-up costs. It can also be utilised to support key early activity such as market research and validation to make sure potential businesses are starting from a viable position. The Scottish Tech Ecosystem Review highlights the estimate of circa 500 start-ups for every 1 'unicorn.' Whilst this approach seeks to create businesses of all sizes and type, the fundamental requirement to create significantly more businesses is recognised and this seed-funding is a remarkably efficient way to stimulate that supply. This approach also recognises that many people will lack the initial funding from their own resource or via 'bank of mum and dad' and this is therefore a great way to promote inclusion. We can also consider opportunities to support business formation in areas of underrepresentation such as female led business in the construction industry. This approach, coupled with WP2.1 and WP 3 will provide the wraparound support to maximise likelihood of success. We must also recognise that many initial start-ups

will not succeed, in which case this will be a low-risk approach that converts potential entrepreneurs into actual entrepreneurs. This makes them considerably more likely to go on to learn from the initial experience and create further start-ups in subsequent years.

Timing

- Y1 (AY22/23) – work with institution on clarity of purpose and use, consider opportunities for co-funding to maximise the national ‘pot.’ Launch by Q3 of this year. Run on ongoing basis throughout Y2 and Y3.

Outcomes

A greater number of students will create a business, contributing to addressing the fundamental need to produce more start-ups. These businesses will support greater inclusion aligned to a fairer economy and they will provide the vital first step in converting potential entrepreneurs into business owners.

WP2.3 – Spinout and Company Growth Mentors and Commercial Champions

We will support Converge to create a national pool of diverse mentors and commercial champions to actively support spinouts and start-ups from universities and colleges to enable high-quality entrepreneurial support to enable companies to grow.

We recognise that companies looking to grow their business require more specific advice and mentoring rather than broad based support of a conventional EiR. We are also aware that one of the significant constraints for start-ups and spinouts in Scotland is the availability of Commercial Champions to work with on and in their business. Additionally, we understand that there can be a lack of transparency on recruiting Commercial Champions and that often there is a lack of diversity in those taking on these roles. To address this, we will work with Converge to improve the diversity of pool of mentors and Commercial Champions on a national basis so that it reflects the needs of businesses, we will expand this beyond spinouts to start-ups, to increase the number of people able to access this expertise. By working with Converge we will create an assurance process for recruitment of mentors and commercial champions to ensure clear accountability. We hear frequently that entrepreneurs want to ‘give back’ but often are not sure how to do this. This approach creates a single point of entry to support and mentor emerging entrepreneurs, bringing greater coherence to the landscape.

Timing

- Y1 (AY22/23) – Development of programme, to include management and training, recruitment of staff where necessary. Recruitment of initial cohort of mentors/commercial champions. Campaign to raise awareness of resource.

Working with SG and other agencies to increase alignment (e.g. intersection with SE HGSP).

- Y2 (AY23/24) & Y3 (AY24/25) – Continued development of programme including ongoing recruitment of mentors/commercial champions. Close working with Converge alumni to foster a long-term pipeline of mentors and champions

Outcomes

Tackling this established bottleneck in supporting spinouts and start-ups will improve the ability for companies focussed on growth and expansion to achieve their aims. Our focus on diversity will ensure that entrepreneurs access expertise that reflects their needs and create a point of entry for experienced entrepreneurs to share their knowledge. This will create a next point in the pipeline to drive company growth putting them in the ideal position to progress to further development e.g. tech-scaler or private investment.

WP2.4 – Expand Converge to Colleges

We will provide greater opportunities for colleges to participate in the entrepreneurial ecosystem by expanding the role of Converge to cover colleges. We will provide resource, where required, to enable Converge and colleges to work together, in partnership with others in the landscape e.g. YES Bridge to Business (if appropriate) to create a new offering for colleges. We anticipate this, as a minimum, will include the formation of a new Converge prize for college start-ups. This reiterates our commitment to a tertiary system and the potential for increased business creation and growth from colleges. Converge is currently funded by a mix of SFC, university match funding and commercial sponsorship. Expanding to colleges opens a whole new set of opportunities.

Timing

- Y1 (AY22/23) – Converge to hire required resource, working closely with colleges and others in landscape to scope out opportunity and practicality of implementing new approach. Agreement to be reached ahead of Y2
- Y2 (AY23/24) – First full run of new approach to be delivered to colleges. Reflection on success or otherwise of first delivery and prepare for further year.
- Y3 (AY24/25) – Further delivery of new approach. Impact assessment to establish efficacy and seek to mainstream if clear added value.

Outcomes

The programme will develop a new stream of businesses that will be supported to grow, further enhancing the pipeline of businesses in Scotland. This will support colleges to target high potential businesses that could achieve growth and give them greater access to expertise and support in the entrepreneurial ecosystem. For some college participant this will change their approach from more conventional micro-company formation towards growing into a larger SME. Deeper culture change will be initiated to embed a tertiary approach to entrepreneurship looking to raise growth ambition at every level of post-16 education.

WP2.5 Shared Incubation Facilities

We will explore with the sector the potential to develop shared incubation facilities by region, where joining resources will both be more efficient for delivery but create a multiplier effect by co-locating founders, resources, and expertise. This aligns to WP3 which may recommend the inclusion of access to incubation facilities as a component of any quality threshold for universities and colleges. Our consultation identified a willingness to share facilities and particular benefit for colleges and smaller universities. This may be initially targeted at students and staff/academics but there would be scope to bring in outside companies or alumni founders.

Timing

- Y1 (AY22/23) - Scope sector to understand availability, uptake and planning for incubation facilities – tied to WP3. From this establish potential gaps and opportunities to co-locate colleges and universities on regional basis. Close working with sector to reach signed agreements or equivalent by end Y1
- Y2 (AY23/24) - in event of successful agreements, promote opportunity, create multi-institutional programme of work. Monitor usage/uptake and consider revisions where necessary
- Y3 (AY24/25) - Ongoing programme delivery and monitoring, consider scope for evaluation and expansion.

Outcomes

Shared incubation facilities will maximise the access and opportunities for entrepreneurs to access the wraparound support to enable them to develop their business. Increased efficiency in provision of incubation space and close collaboration between the sector. A more vibrant and diverse culture within the incubation facilities and a multiplier effect generated by co-locating entrepreneurs and expertise.

Work Package 3 – Establishing a quality threshold (previously baseline) and sector targets

We will work with universities and colleges to define a quality threshold that establishes the culture of an Entrepreneurial Campus. This will define the activity, support and provision which every university and college in Scotland should provide to ensure an environment where entrepreneurship can thrive. This will build on the significant activity that is already being undertaken in the sector

We will undertake a review of the current state-of-play in each university and college to identify where their current offering aligns to the quality threshold and where there are opportunities to support changes that will ensure the threshold is met. This approach recognises that each institution has its own strategies and regional context which underpin the approach to entrepreneurship, and this brings value in its own right. This approach respects institutional diversity and ensures we are not imposing a one size fits all model on the sector.

Aligned to the quality threshold we will work with the sector to establish individual institutional stretch targets that will drive entrepreneurial activity and through the collation of these targets and working with wider stakeholders, such as Converge, we will establish the ambition for the sector and associated targets. This will likely include, for example, the increase in students accessing entrepreneurial education, number of start-ups being generated, number of spinouts being created, companies securing additional funding or accessing further services (e.g. High Growth Spinout Programme, SNIB, Innovate UK). The collation of this will be undertaken to support WP 4.2.

WP3.1 University quality threshold and targets

WP3.2 College quality threshold and targets

We will support the resource required, likely via secondment or funding sector bodies, to undertake the state-of-play research to understand the current activity in universities and produce a report. In parallel we will convene sector representatives and wider stakeholders in a short life working group to establish the key elements to be included in the quality threshold. We will then be able to identify where each institution is against the threshold and identify areas for enhancement. This will inform institutional stretch targets which we will ask universities to submit for review.

Timing

- Y1 (AY22/23) - Recruit necessary resource, likely secondment. Undertake research, produce report, and form short life working group to establish

threshold. Work with institutions to establish stretch targets and confirm national targets and duration.

- Y2 (AY23/24) – Ongoing work with sector to identify actions being undertaken and highlight challenges/opportunities in meeting threshold and targets. Oversight and governance of progress ongoing.
- Y3 (AY24/25) – Review of progress and appraisal of current position, review targets to establish accuracy and refresh if needed.

Outcomes

The quality threshold will determine the types of activity that we expect to see undertaken to demonstrate an Entrepreneurial Campus. This will drive improvements and give clarity of focus and approach for institutions, raising their ambition in the process. The targets provide an aim and a method to measure success and provide the underpinning expectation that will ensure accountability for institutions. The research projects will give a robust evidence base and capture the diversity of the sector.

Work Package 4 – Governance, accountability and dissemination

WP4.1 Governance and Advisory Group

We will form a Governance and Advisory Board to be formed of academic, industry and key stakeholder which will guide the strategic direction the strategy and ensure progress is being monitored and that each workstream is delivering its objectives. This will also seek opportunities to support closer integration across the workstream and identify opportunities in the landscape for development. This will be an advisory board with an observer from SFC and SG (?) to monitor spend and budget. Host institution???? We will work with the sector to establish a terms of reference which recognises the dispersed nature of the work and the relative governance challenges this could present.

Timing

- Y1 (AY22/23) – Establish terms of reference in Q1 and initiate recruitment with intention to convene group in Q2. Meetings quarterly, with Q4 to include review and strategy day.
- Y2 (AY23/24) & Y3 (AY24/25) – Ongoing quarterly meetings and strategic planning for beyond Y3

WP4.2 – State of the Nation report and celebration event

We will work with sector to produce an annual state of the nation report which will demonstrate progress to date, collate case studies and identify upcoming activity. This will bring together a large set of activities under a single common publication

and demonstrate the sectors collective ambition as well as producing a significant resource bank of case studies for use in wider application. We will work with sector to hold an annual celebration to coincide with the report publication and bring together the sector, industry and the public sector to showcase successes and foster a culture of collaboration. This will also provide opportunities to promote the capabilities of the sector more widely, including supporting FDI and international partnerships.

Timing

- Y1 (AY22/23) – Planning for celebration event to begin with view to delivery of event in Q4. Initial report to be published in Q4. Much of Y1 about setting context and ambition utilising existing activity and best practice.
- Y2 (AY23/24) & Y3 (AY24/25) – Reports in Q4 each year with collation of new case studies and progress against targets. Celebration event to grow year on year and increasingly supporting collaboration and strategic partnerships.

Outcomes

The state of the nation is accountability and celebration and strategic communication. It becomes a valuable resource which showcases sector progress and collaboration. The celebration event takes this to the next level and showcases the entrepreneurial culture in Scottish universities and colleges to key audiences such as industry, policymakers and international delegates.