Sharing support for SHAPE Commercialisation

An exploration of the evidence base and options for shared approaches for supporting SHAPE commercialisation

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Executive Summary

Our project sought to provide a new and compelling understanding of the value proposition for shared technology transfer office (TTO) models in SHAPE commercialisation, to improve the efficacy and efficiency of follow-on activities to test that proposition in practice. To that end, we conducted: i) a survey of a wide cross-section of English Higher Education Providers (HEPs); ii) in-depth follow-up interviews with 40 HEPs; and iii) focus groups held with stakeholders from the devolved nations of Scotland, Wales and Northern Ireland (the design of which was informed by findings from a literature review).

The project originally aimed to:

1. Provide robust evidence of the status quo of SHAPE innovation.
2. Better understand the role that larger HEPs or more well-established SHAPE cognisant TTOs might play in new shared functions.
3. Explore how to develop a shared TTO and what success might look like
4. Generate insights into the relative importance of discipline vs geography in building effective shared TTOs.

The report that follows offers a summary overview and some initial reflections and recommendations against these four main areas. Whilst the review gathered robust data about the current state of SHAPE commercialisation and needs of the sector, we did not find evidence for one single model for sharing. As a result, we present these more as prompts for further discussion and suggestions as to potentially fruitful next steps, rather than as concrete recommendations. We have also provided here as much of the data collected during this project as our data management and confidentiality commitments allow, with the intention both of inviting others to challenge and input to this discussion and of allowing those interested to continue to analyse and make use of the data themselves. Although the original proposal used language such as "TTO", we reframed this early in the study to look more broadly at sharing commercialisation support (through a TTO or otherwise).

The consultation work conducted as part of this project revealed significant interest in and willingness amongst SHAPE professionals to work together to advance the commercialisation of SHAPE research outputs, including (though by no means only) through spinning out new ventures. However, no single 'one size' model emerged as a clear favourite to support this shared ambition. Rather, the requirements for sharing SHAPE commercialisation support seemed to be linked more to the self-reported maturity of that support within an institution. Furthermore, the list of activities that were deemed most valuable for sharing (see **section 4.4**) includes areas or elements beyond those that might be considered "traditional" or core roles for a TTO. It also suggests the possibly greater value of sharing parts of the TTO process, rather than the whole process, or in creating mechanisms for sharing practices and problem solving rather than sub-contracting support.

With this in mind, it may be that the first focus for any sharing model should be less of the provision of any one service to accelerate the commercialisation of particular (types of) products or services, or the end-to-end commercialisation of research in particular areas, and more on a broader, more generalised effort to build the maturity of SHAPE commercialisation support across UK universities. In other words, it may be that the existing SHAPE commercialisation ecosystem is not yet sufficiently well developed to meaningfully or productively support any existing model of shared TTO provision. In that case, a sensible first step could be to develop collective mechanisms to extend and enhance the ecosystem.

Participants at the project's Validation Workshop, 29th April 2025

SHAPE commercialisation maturity is gradually increasing, but is still relatively low

Initiatives such as the Aspect network and the URKI SHAPE Catalyst have contributed significantly to the understanding and practice of commercialisation of SHAPE disciplines, and the UK is recognised as a leader in this space. That notwithstanding, it is important to contextualise the findings in this report with the observation that, whilst advancing rapidly, SHAPE commercialisation is still at a relatively early stage, with over 70% of all institutions participating in our study reporting efforts are 'seeding' or 'nascent', rising to 100% within KEF clusters J and M (that is, institutions with a primary focus on teaching, rather than research). Many institutions report low levels of dedicated resource for SHAPE commercialisation (support often amounts to less than 1FTE) and a perception that STEM commercialisation is viewed as more important. Consultation responses also highlighted a lack of standardised approaches to and detailed case studies of SHAPE commercialisation, and whilst networks like Aspect have provided important platforms for knowledge sharing, not all HEPs have the resources to fully participate in these.

Resource constraints mean the role of larger or more established HEPs may be limited

One hypothesis explored in this study was that larger, more established HEPs may act as hubs in a regional shared TTO model. However, our findings cast some doubt on the viability of this. Even relatively large, more mature HEPs lack the capacity and resources to provide services to others. The study also raised questions about IP issues, the cost model and the inability to grow individual HEP capacity and capability if the service was effectively outsourced. There was more support for models that built on existing collaborations (such as mission or membership groups, e.g., SETsquared, Midlands Innovation, etc.). Whilst larger institutions within such collaborations may naturally play a more central or coordinating role, the perception of equal sharing was important.

Participants at the project's Validation Workshop, 29th April 2025

Commercialisation support needs differ by maturity level

In terms of *what* types of support could be accessed via a shared approach, there was broad recognition that a variety of shared services could be beneficial. Of these, shared training was identified as the single most potentially useful area, with 95% of respondents rating this as highly or somewhat beneficial. This was followed by good practice and process sharing, and networks (investors, spin-out managers etc.) There was weaker support for sharing outsourced support, platforms (e.g., to showcase innovations) and for centrally negotiated pricing (e.g., for software or subscriptions), with higher numbers of respondents reporting that this would not be beneficial to them.

These stated preferences for the types of support to be shared perhaps reflect our previously stated finding that, as a sector, SHAPE commercialisation is still relatively immature and most HEPs have pipelines that are both relatively small (when compared to STEM) and absolutely small (in terms of total number of projects). As such, in-house support is typically still focused principally on building capacity, capability and engagement with the idea and value of commercialising SHAPE research.

However, the data did suggest some differences for HEPs at different stages of maturity. HEPs who assessed themselves as having a more mature SHAPE commercialisation support function (i.e., those who rated themselves as 'working towards critical mass') were much more receptive to 'traditional' outsourced commercialisation services, possibly because they were more confident of their own internal capability and were now encountering capacity constraints as the pipeline increased.

For those in the earlier stages of the SHAPE commercialisation journey, the most frequently cited needs identified from the survey were: i) Academic staff training and awareness; ii) Sharing of good practices – e.g., policies and processes; and iii) Access to pre-accelerator/accelerator programmes. Conversely, there was little reported need for support for, e.g., raising investment, contract negotiation and venture creation, presumably because the pipeline maturity meant that many potential ventures were not far enough advanced to require such support.

This trend was largely reversed for those who report a higher level of maturity ('working towards a critical mass' or 'building a scalable, repeatable process'), although there were still moderate levels of demand for academic staff training and awareness. The top areas of additional expertise or support identified largely reflect this later maturity stage and included: i) Sourcing/creating founding teams; ii) Raising investment and building investor networks; and iii) Access to pre-accelerator/accelerator programmes. It is worth reflecting, however, that some of these needs could be linked to differences in SHAPE commercialisation rather than maturity (e.g., a need for social impact investment, differences in the markets for SHAPE ventures and therefore the types of networks and teams, differences in commercialisation pathways and business models, etc.)

The data also indicated specific needs or gaps in SHAPE support offerings (separate to the question on where they saw benefit in sharing), including: i) Free access to resources, including good practice, policies and common templates; ii) Specialist support for some specific parts of the commercialisation journey, such as developing the value proposition and identifying routes to market, particularly where specific market expertise (e.g. accessing the public sector or NHS etc.); and iii) more access to acceleration and pre-acceleration programmes such as the UKRI SHAPE Catalyst.

There is a strong appetite for sharing and collaborating on SHAPE commercialisation, but funding or central co-ordination may be beneficial

In terms of what was identified as most desirable to share, some of the potential shared services (such as peer support networks, template documents, shared training offerings etc.) may not fit with the conventional view of shared TTO services. However, we suggest here that, in reality, all TTOs engage in such activities, regardless of the academic disciplines they serve. In addition, this work has also identified a set of more 'traditional' TTO functions that are perceived as being beneficial to access on a shared basis, including expertise to help triage opportunities, mentoring and specialist support on routes to market and IP, legal and other miscellaneous business services.

In terms of how such a model could best be delivered, it was noted that the shared services required could be fulfilled through multiple mechanisms, with differing resource requirements. For example, shared training could be provided through, for example, a hub and spoke model, procurement framework or other sharing mechanisms. From our literature review, the research on existing models for sharing commercialisation support all have potential to deliver significant cost savings when delivered on a shared basis. However, whilst there is clear evidence that shared services (particularly ones with obvious economies of scale such as training) realise efficiencies and cost savings, detailed modelling of such benefits was beyond the scope of this project.

Furthermore, participants in the consultation frequently mentioned their limited resources and funding (both generally, and specifically when it comes to SHAPE commercialisation), and noted costs for set-up or participation in sharing models could be a significant barrier to sharing. For some potential shared models, questions were also raised about how contributions would be apportioned across institutions. Those at an early stage of maturity (and thus with small or uncertain pipeline) were understandably concerned about committing to high fixed costs. Constraints aside, there seemed to be highest support for shared models that build on existing collaborations, including regional ones. However, to maximise efficiency, we suggest that some shared services are best provided at a national level, such as repositories of good practice material, development of shared templates, accelerator services.

The results of the initial consultation work completed as part of this project were further developed via a 'Validation Workshop' on 29th April 2025. The event was attended by 30 participants. Overall, the findings were positively received, and the participants were enthusiastic about the concept of shared commercialisation support for SHAPE. They validated that the interventions identified in the report do reflect sector needs, although there will be variation across institutions as to which are the biggest priorities. In terms of next steps, time and funding will be the key enabler for progressing these sharing approaches. Some of the interventions may benefit from 'task and finish groups' to explore how to realise them, whilst others are ready to secure funding and run pilots. A critical recommendation from the workshop is that shared SHAPE commercialisation requires an integrated approach. These interventions will help to build a pipeline of SHAPE commercialisation (and internal capacity), so that TTOs can then participate in – or identify projects that can benefit from – the other shared TTO models that are being developed via this same CCF-RED funding call.

Participants at the project's Validation Workshop, 29th April 2025

Introduction

2.1 About the project

This project was developed in response to a Research England call for applications to a scheme piloting shared technology transfer functions in universities in England. It was led by the London School of Economics & Political Science, in partnership with the Universities of Bristol, Lancaster and Leicester, and the Royal College of Art, and ran from 1 November 2024 and 30 April 2025.

This project sought to establish an understanding of the value proposition for shared Technology Transfer Office (TTO) models in SHAPE (Social Sciences, Humanities, and the Arts for People and the Economy) commercialisation. The project had four key objectives. First, it aimed to engage a wide range of UK Higher Education Providers (HEPs) to deepen and formalise understanding of SHAPE commercialisation needs. Second, it sought to establish a robust evidence base relating to current practices, highlighting needs among HEPs supporting SHAPE spinouts.[1] Third, the project would evaluate the merits of different "sharing models" for TTO functions. Lastly, it would offer evidence-based recommendations for strengthening SHAPE commercialisation, with a focus on England and relevant insights for devolved nations.

As laid out in the project's application for funding, the rationale for the project was as follows:

> *'[T]here is substantial heterogeneity in the research bases, current TTO capacity and capabilities, and individual circumstances and priorities of UK HEPs. Absent in-depth understanding of these issues across a wide range of institutional types and disciplinary bases, there is a real risk that time, effort and money will be invested sub-optimally in solutions that do not meet sector need. This project provides an opportunity to address that risk by creating a new and robust evidence base and informed value proposition for the creation of shared TTO functions supporting SHAPE. The work will address a significant gap in policy, sector and funder understanding of the needs of smaller institutions with SHAPE-based innovation activity and of the willingness and ability of larger institutions to meaningfully and effectively share TTO functions to mutual benefit.'*

Particularly, the project sought to produce a detailed picture of current approaches to SHAPE commercialisation, needs, and thoughts on sharing models, through addressing the following questions:

1. What does commercialisation/spinout support look like in different HEPs?
2. Where do HEPs feel they have significant capacity and capability gaps or could support the biggest gains?
3. How much and what sorts of resource larger (or better resourced) HEPs might be willing to share to support spinout activity in smaller HEPs, and what terms and conditions and/or incentive or reward schemes would need to be in place for them to do this?
4. What are the most significant challenges and benefits that both large and small HEPs perceive in sharing TTO functions and the key factors for consideration when assessing possible solutions?
5. Which model(s) of sharing a range of TTO functions are deemed feasible, viable and desirable, and what conditions would need to be met to start implementing one or more of these models?
6. Is preferable to share capacity at regional level, by specialism, or by some other means at sector level?

Although the project was originally framed to understand the needs for shared SHAPE technology transfer office, we acknowledge that language such as "technology" is not always suitable for SHAPE, and also that "office" suggests a place rather than the services themselves. Early in the

1 Because the scope of the CCF-RED funding was specifically focussed on sharing support for spinouts, the original project scope was aligned in this focus. However, we are aware that licencing may be a better pathway for some projects and as such, our research included questions about the breadth of commercialisation options for SHAPE.

project, we therefore took an approach focussed on understanding the need or rationale for sharing more broadly, whether that be through a shared TTO or through another mechanism. As a result, whilst the questions above have guided the design and approach to the sector-wide consultation, we have not taken a rigid approach to answering each point; rather, we have used these to inform the direction of the project's activities.

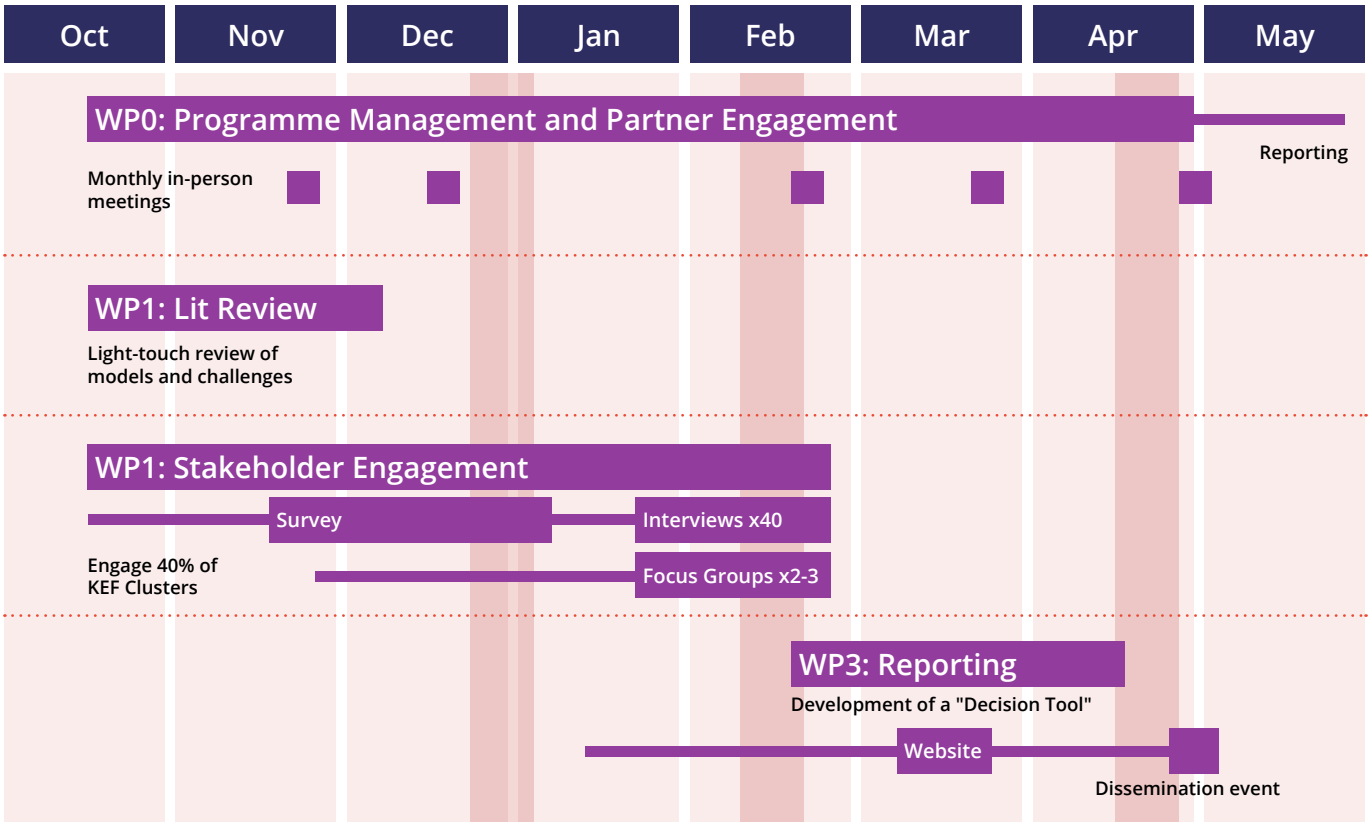
2.2 Methodology

The day-to-day management of the project and responsibility for its delivery and success lies with an Operations Group made up of representatives from each partner institution. The Operations Group met monthly to shape and guide the direction of the project, and provide input or content where needed. High-level oversight and strategic governance of the project was provided by a Steering Group (SG) made up of senior managers from those institutions.

Oxentia Ltd was contracted to provide programme management and delivery of the project activities, under oversight of and in collaboration with the Operations Group. The project activities included the following:

1. **Literature Review –** A "light touch" high-level review of known literature about approaches to SHAPE commercialisation and/or to sharing technology transfer support, to inform the consultation activities.
2. **Survey –** Sector-wide survey, resulting in 52 responses from 45 of the 139 UK universities, giving a 32% total sector response rate.
3. **Interviews –** Interviews with 40 UK universities, to facilitate a 'deeper dive' into survey responses and to build up a more detailed and nuanced response to key project questions.
4. **Focus Groups -** Three focus groups with representatives of the higher education sectors in the devolved nations, to understand if there are any unique differences or needs.
5. **Reporting & Dissemination** – Preparation of this final report, a website to disseminate the findings, and hosting a final event for the sector.

Figure 1: shows the project timeline.



2.2.1 Sharing models

The original project proposal included thoughts on different 'sharing models' for a SHAPE TTO, which could be explored during the consultation (**Box 1**). These included a mixture of approaches such as ways for sharing commercialisation services (e.g., outsourcing support to another organisation or having one HEPs lead or provide services for others), ideas for leveraging collaborative STEM initiatives to better include SHAPE, and mechanisms for people-development (e.g. through shadowing or secondment). In addition, the Literature Review highlighted other models, but mainly those for sharing TTO services.

These models were explored during the consultation to stimulate thinking on what might be possible, rather than limit the options for what sharing might look like. An important point about the consultation was to remain neutral about the idea of what 'sharing' could include, and not to assume that sharing was required by the sector either.

Box 1: Potential models for shared SHAPE spinout support in the UK, as suggested in the funding application and literature review

As part of Objective #3 in the funding application, 'sharing models' to be explored during the project included (but are not to be limited to):

i. Groups of HEPs commissioning outsourced support from a non-higher education organisation with the skills and experience needed to support tech transfer in SHAPE spinout support.

ii. Individual HEPs with more TTO capacity charging a fee for the use of their existing services by smaller providers.

iii. New mechanisms for cross-disciplinary collaboration facilitating the meaningful inclusion of SHAPE in STEM-based spinouts, such that SHAPE innovation 'piggybacks' on TTO support for STEM commercialisation.

iv. Opportunities for more people-focused development through mentoring, secondment or shadowing initiatives between HEPs.

v. Promoting more SHAPE representation in existing collaborations intended to maximise capacity and capability, including to raise funds (as in Northern Gritstone).

Other models highlighted in the literature review included:

vi. **Share equally** – in which resources are pooled across a group of institutions, with no one institution leading (peer support, good practice sharing)

vii. **Hub and spoke** – in which a larger 'hub' institution coordinates access across a group of institutions to TTO services (e.g., pre-acceleration and acceleration services, shared training etc.)

viii. **Shared services hub** - in which a group of universities contracts an external provider to coordinate and facilitate access a range of TTO services (e.g. IP/legal/business services, shared templates)

ix. **Procurement framework** – which reduces friction in procurement processes across a group of universities but doesn't involve any wider collaboration (e.g., IP/legal services, training, other specialist support).

2.2.2 Analysis and outputs

One original envisioned output from the project was a 'decision tree' tool, intended to help individual institutions understand what models or approaches to sharing support for commercialisation would be a good fit for them. We expected determining characteristics to include things like institutional size, location, disciplinary balance, research intensity and so on.

This expectation informed our decision to analyse survey and interview data by KEF clusters, since these broadly embody the variables we expected to be central to such a decision tree tool. We also did a brief analysis of the survey results based on institutional size (using HESA Staff Record and HESA Research Grants and Contracts income), but the preliminary analysis did not show any obvious trends, and we therefore did not pursue it further. External factors (e.g., funding and resources aimed at local development or growth, civic engagement plans, local partners and investor networks, etc.) could also inform commercialisation teams' desire to share support, and whilst we did ask participants about geographic considerations, exploring these points in detail was out of scope for this review but could be something for future investigations.

As we discuss in the following section, the project findings challenged our original hypotheses both about where the greatest value in sharing was likely to lie and, importantly, about what sorts of characteristics might inform this perception of value. As a result, it was not feasible to produce a decision tree of the type we initially imagined, although we hope that the final project recommendations will fulfil a similar function in terms of helping individual institutions think through and evaluate the potential value of the sharing options available to them.

2.3 About this document

This report is a final output from the project, bringing together findings from the consultation activities, and discussing our reflections about what this could mean for sharing SHAPE commercialisation support in the UK.

The initial findings in this report were shared and discussed in April 2025 at a workshop with the consultation participants and other representatives from the sector. The aim of the workshop was to validate the findings in this report and refine the proposal for shared approaches for supporting SHAPE commercialisation. This would ensure that recommendations from the project are co-created, community-informed interventions that will best address our collective needs, enabling funders to make informed decisions about how they can best support our collective and individual efforts to drive impact through SHAPE commercialisation and spinouts.

Following the workshop, section 5 has been updated to summarise feedback and proposed next steps coming from the event. This is accompanied by new **Appendix 4**, which includes the notes from the workshop discussion groups. This report and the consultation results will also be published on the project website (see **Appendix 1** for a link to the website).

Photo from the project's Validation Workshop, 29th April 2025

Summary of Findings

This section includes a summary of key takeaways from each of the activities undertaken in this project.

As mentioned in **section 2.2** on Methodology, we originally analysed survey and interview data by KEF clusters but could not identify any strong trends that might point to a 'decision tree' for how HEPs can choose the best sharing model for themselves. The data does show, however, areas of need and opportunities for collaboration in supporting SHAPE commercialisation, which could inform how a sharing model is designed.

The surveys and focus groups showed a spread of interest in different sharing options, which seemed to be contingent more on the self-reported maturity of their SHAPE commercialisation support than on any other single characteristic; the interviews were able to add more nuance and showed a strong interest and appetite for a collaborative approach to SHAPE commercialisation in the UK. Note that the literature review was mostly used to provide context and inform the consultation activities but could also be used to draw in lessons from elsewhere on what has worked (and what has not) in terms of how to structure a shared TTO offering.

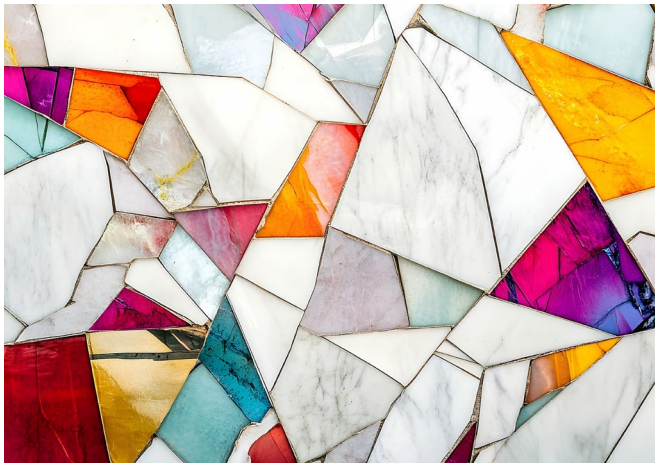
A more in-depth analysis comparing the findings across the primary data sources (surveys, interviews, and focus groups) is included in **Appendix 2.**

3.1 Literature review

With input from the Operations Group, Oxentia completed a review of existing literature documenting and (in some cases) evaluating a wide range of current and previous UK and international approaches to sharing support for technology transfer, particularly in SHAPE disciplines. The review focuses on:

1. **SHAPE commercialisation** – particularly the challenges and opportunities that make supporting SHAPE commercialisation different from STEM.
2. **Best practice in technology transfer** – common models for and examples of shared support for spinouts and commercialisation, and an exploration of interesting approaches and best practice in supporting these things in SHAPE.[2]
3. **Other shared services or support functions across universities** – looking at examples of other types of shared support (beyond TTOs) that might we be able to learn from.
4. **Conclusions** – How might all of this inform the options and design for a shared SHAPE spinout support function in the UK.

See **Appendix 1** for a link to the full literature review.



Conclusion

The review suggests that no single sharing model has already been robustly proven to be desirable and effective in any disciplinary, institutional or geographical context. It also provides useful examples of what has been tried before in different contexts and, as such, informed our development of content for the sector wide consultation.

2 Because the scope of the CCF-RED funding was specifically focussed on sharing support for spinouts, our analysis looked more closely for literature related to the spinouts. However, we are aware that licencing may be a better pathway for some projects and this research focus does not imply that spinouts should be or are the primary commercialisation pathway for SHAPE.

3.2 Sector-wide survey

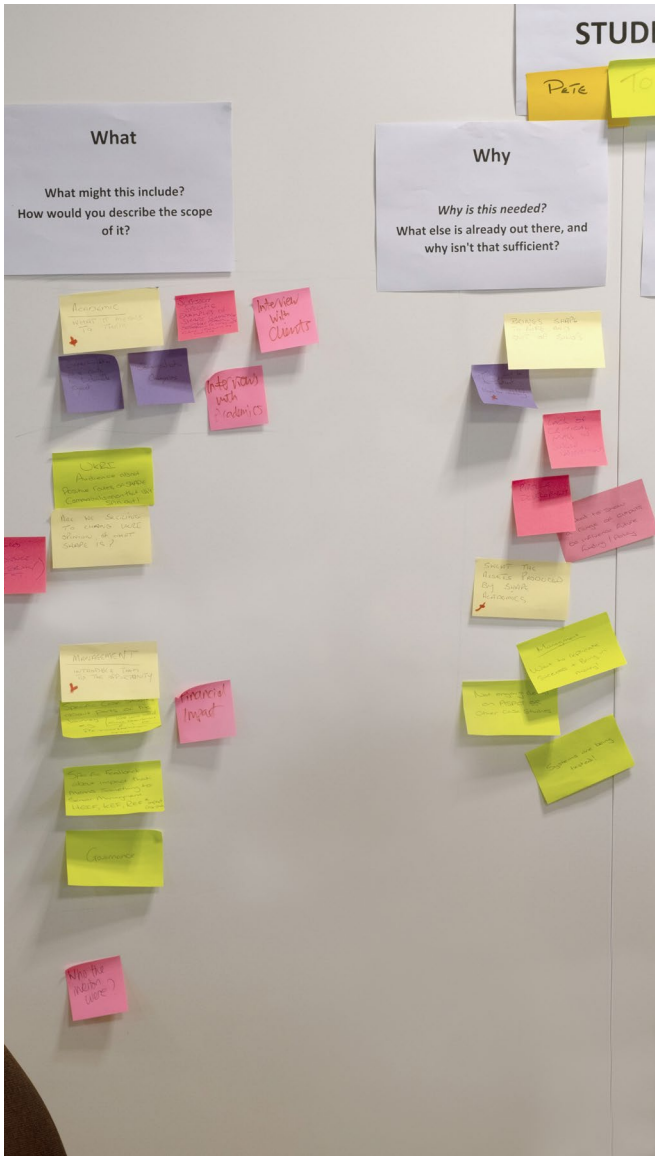
The survey was designed by Oxentia with input from the Operations Group, informed by insights from the literature review. The survey was open between 12 December 2024 and 22nd January 2025, during which time we received **52 usable responses**. Three further responses were removed prior to analysis responses due to respondents' failure to complete past the first page.

Responses were submitted by representatives from **45 of the 139 UK universities**, giving a 32% total sector response rate. **All KEF clusters were represented.** Clusters V and X had the highest representation (44% of institutions within those clusters responded to the survey; the ARTS cluster is the least well represented, with only 19% of its universities responding. A majority of respondence (63%) told us that they were responding as individuals, whilst 37% reported providing an institutional response. Most respondents reported their primary area of work as wither 'Research Commercialisation / Technology Transfer' (25%) or 'Knowledge Exchange' (15%). 33% described themselves as holding positions of senior leadership.

Some high-level insights from the survey data are summarised here, with the caveat that this is only a partial view of the sector, and further information gathered through interviews provides a deeper and slightly different view:

i. A handful of KEF clusters – particularly clusters J and M and the ARTS cluster - tend to show strong similarities in their responses to many of the survey questions. In general, though, very few clear patterns emerged at cluster-level in terms either of existing support or preferences for potentially shared support for SHAPE commercialisation.

ii. Instead, the key variable seems to be the self-reported maturity of commercialisation teams, which we invited respondents to describe as either 'seeding', 'nascent', 'moving towards a critical mass' or 'building a scalable, repeatable process'. As such, those identifying (for example) as 'nascent' are more likely to report similar existing support and interests in sharing support than are those who identify as 'building a scalable, repeatable process', irrespective of the type or size of organisation (at least insofar as the latter characteristics are accurately represented by KEF cluster).



Outputs from the project's Validation Workshop, 29th April 2025

iii. Survey responses do highlight clearly identifiable gaps in funding and other dedicated support for SHAPE commercialisation across a majority of responding institutions. These might suggest fruitful priority areas for piloting effective shared commercialisation approaches.

iv. Among these 'gap' areas, those that are most frequently cited as likely to benefit from access to additional support or expertise are:

   a. Academic staff training
   b. Shared best practice
   c. Sourcing or creating founding teams
   d. Access to pre-accelerator programmes like the UKRI SHAPE Catalyst

v. Again, though, some important differences in preferred areas for access to additional support (including potentially via sharing models) emerge along the lines of self-reported maturity of SHAPE commercialisation at the HEP. The most 'mature' HEPs reported perceiving the greatest value in sourcing or creating founding teams and in building investor networks, whilst less mature support services especially favour additional support for training and sharing best practice.

vi. Perhaps surprisingly, relatively few institutions anticipated "significant benefit" from sharing support for more technical elements of tech transfer such as contract negotiation, venture creation or academic consulting support. Instead, the focus seems to be on capacity building, skills development and networking. That said, when the "somewhat beneficial" responses are included alongside "significantly beneficial" responses, there is less difference between the individual elements that were asked about in the survey. A link to the full survey data analysis is available in Appendix 1.

vii. The results give some indication that, even where SHAPE disciplines are well represented in an institution's research portfolio, SHAPE projects still usually make up a relatively small proportion of the commercialisation portfolio.

viii. Most respondents are not satisfied with the number or percentage of SHAPE commercialisation projects in their portfolios, suggesting an awareness of untapped potential. This is particularly true at institutions that report having relatively immature SHAPE commercialisation support.

ix. Institutions who report having more dedicated staff support also report higher levels of satisfaction with their SHAPE commercialisation portfolio.

See **Appendix 1** for a link to a full copy of the survey questions and an anonymised version of the survey results.

Conclusion and Considerations

The survey was the first component of the consultation to be completed. The analysis provides a useful evidence base about the breadth of ways in which organisations support SHAPE, and the types of gaps and needs that exist.

Specifically, there appears to be a need for capacity building (training and development), funding and resources (because pipelines are growing but then stalling due to a resource bottleneck for SHAPE), and more acceleration services. For HEPs at a higher maturity level in SHAPE commercialisation, there were needs around servicing the pipeline (outsourced services of various kinds), market access and raising investment.

However, given that shared resource models are typically used to overcome the inefficiencies of several organisations doing the same thing, the survey is inconclusive about whether there is enough of a shared need to standardise or scale up specific shared TTO activities. Instead, when taken with findings from the focus groups and interviews, the survey data suggests that a shared model might need to focus on building the maturity of SHAPE commercialisation in the UK (i.e., sharing or investing in some of the discrete activities identified by respondents could help progress more projects through the commercialisation pipelines), in addition to providing some specific shared services, where even large HEPs lack the pipeline to undertake the activity efficiently on their own, (for example, running an accelerator) or where there are clear economies of scale (for example, in training design and delivery).

We had hypothesised that the survey might highlight significant differences in the needs of HEPs within different KEF clusters or other trends in terms of needs or opportunities for sharing SHAPE commercialisation support. However, whilst there were some patterns relating to support needs and maturity level, no very strong trends emerged in our analysis.

3.3 Focus groups

In addition to the survey and interviews with HEPs in England, the project included three focus groups with representatives of the higher education sectors in the devolved nations. These were held in early February 2025 with nine participants from Scotland, four from Wales and one from Northern Ireland, and sought to understand:

- What is different about the research and innovation/ commercialisation landscape of each nation;
- What they are currently doing to support SHAPE commercialisation and how/if this differs from STEM support; and
- How their unique context affects the viability of different shared SHAPE TTO models.

The focus group discussions suggested broad alignment with English HEPs in terms of current approaches to supporting SHAPE commercialisation, important concerns or barriers to this, and the sorts of priorities and preferences expressed in relation to sharing support. Key takeaways from these focus group discussions were that:

i. As in England, most devolved nation institutions lack dedicated or expert staff to support SHAPE and consider themselves at an early stage of maturity.

ii. A lack of public funding is a major barrier to supporting SHAPE commercialisation, often at odds with devolved governments' messaging about the importance of SHAPE commercialisation. For example, some participants suggested that because there is less access to HEIF-type funding, there is a push to prioritise commercialisation activities with more chance of generating income.

iii. Further significant barriers (perhaps more specific to devolved nation contexts) identified included: a lack of access to either investors (either angels or VC) or mentors; a lack of critical mass in SHAPE commercialisation projects; and limited access to case studies of success and/or champions for SHAPE commercialisation.

iv. Most recognised STEM commercialisation as a priority because of a lack of funding to support SHAPE and because of pressure to demonstrate financial impact via income generation, which was thought to be more achievable in STEM innovation.

v. Most reported having a very early-stage portfolio of SHAPE commercialisation projects.

vi. As in England, many institutions said they would value increased and enhanced access to shared good practice, resources and tools, and to capacity-building activities and programmes to support pipeline creation (like UKRI SHAPE Catalyst).

vii. Geographical proximity and cultural awareness (at institutional, as well as national levels) were identified as important in developing shared approaches.

viii. Otherwise, the discussions did not suggest any very clear patterns in terms of where institutions might naturally or productively coalesce to share support, although there was a feeling that the smaller size of the sector and more collegiate atmosphere might make collaboration easier than in England.

ix. The focus groups did not indicate any very strong preference for any of the sharing models discussed.

x. Several participants emphasised the need to focus on activity that supported culture change first, and expressed less interest in sharing models that do not advance that, or that allow them to continue to develop their own internal capacity and capability (notably a 'procurement framework' model, which was not perceived to add a lot of value).

xi. Concerns about IP ownership were raised, as were questions about how sustainable any shared model might be and who would 'own' and drive it, given constraints on capacity within all institutions.

See **Appendix 1** for a link to an anonymised version of the full focus group results.

Conclusion and Considerations

The focus group findings are largely aligned to survey and interview findings. There is no clear preference for specific model (structure) for sharing, but feedback from participants suggested shared support should take account of the following:

- Geographic proximity is only relevant in the sense of being able to speak with academics in person to build relationships and where legal considerations could vary in the devolved nations; but otherwise, a sharing model across borders could work and in fact may make more sense (in terms of having a critical mass of HEPs involved).
- HEPs involved in sharing SHAPE commercialisation support wish to retain control over their own IP (from the projects being commercialised) and their own academic relationships. Any shared model should be structured such that confidentiality of IP of projects being commercialised is protected; but more significantly, the findings imply that pooling IP/ income from commercialisation was not viewed as desirable.
- Whilst there was no clear pattern on the type of support needed for SHAPE commercialisation (i.e., based on size or type of HEP), the findings suggest that access to more support like the UKRI SHAPE Catalyst (building commercialisation projects and academic capacity), and sharing resources on practice, policy and/ or training would be beneficial. Whether or not this support is best delivered through a shared 'TTO', or some other collaborative model is to be determined; but the findings overall suggest that most HEPs may not need to share the whole commercialisation process, rather they have a need for support with specific elements of the process. This aligns to survey and interview findings.

Whilst there was no strong preference for any of the models proposed in the focus groups, our sense is that this could be in be because participants felt that none of these models are likely to work without additional resource/funding. For example, it was noted that the concept of some HEPs acting as a 'hub' to delivered or manage shared services on behalf of others would not be viable without additional funding and/or human resources, as most teams are already resourced-constrained. It may be worthwhile re-examining the question of whether any of the models could be fit for purpose with versus without additional external funding or support.

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3.4 Interviews

The purpose of the interviews was to facilitate a 'deeper dive' into survey responses, and to build up a more detailed and nuanced response to key project questions. In some cases, we also used interviews to elicit responses where a survey has not been completed but where we are particularly keen to include an institution's perspective in the overall project analysis. In addition, interviews were used to ensure the fullest possible representation in this study of different types and sizes of TTO, and of TTOs with a full range of levels of 'maturity' and experience in supporting SHAPE commercialisation.

Interviews were completed with **53 individuals** representing **40 universities**. Nineteen of these individuals also completed the survey, and many of the larger HEPs that did not participate in the survey did instead participate in interviews. The target was to engage 40% of each KEF cluster and overall, we were close to meeting this goal (albeit with a slight over-representation of Clusters V and slight under-representation of E).

Whereas the survey findings were inclusive about the interest in sharing SHAPE commercialisation support, the interviews uncovered a huge appetite for shared SHAPE support and facilitated deep, cathartic thinking about enablers and constraints around how a shared SHAPE TTO offering might accelerate the activity and quality of SHAPE commercialisation nationally. Key takeaways from the interviews were as follows:

i. It was clear from the interviews that SHAPE commercialisation, across the sector, is supported at a clearly reduced level compared to STEM, irrespective of KEF cluster.

ii. Having limited resources impacts on a HEP's ability to share; their eagerness to commit resources to helping others was somewhat tempered by their reluctance to accept any negative impact on their own operational delivery. Even larger institutions expressed concern about ability to share, i.e., even if they had greater resources, they still did not have spare capacity.

iii. There was strong indication that something to further enable SHAPE commercialisation in the sector is needed, and interviewees demonstrated a strong appetite for engagement in co-creating a solution (from this project's findings) to ensure there is a tangible outcome that is fit for purpose for the coming 5-10 years, when the benefits of previous CCF funding are being realised.

iv. It is clear that a one-size-fits-all approach is not the solution, and that deep understanding of sectors, markets and specialisms needs to underpin any shared offering.

v. The interviews elucidated a need for a flexible, possibly tiered, sharing model with (potentially free) access to a repository of supportive content which can be expanded to (potentially paid for) specialist advice when needed. This prompted thinking around a range of model approaches/options for sharing SHAPE support, which we have explored further in **section 4**.

vi. The interview findings suggest that a concerted, structured shared TTO offering could be a driver for a cohesive, directional and innovative national SHAPE commercialisation ecosystem in place of the current piecemeal approach where the protagonists are overstretched and underconfident.

See **Appendix 1** for a link to an anonymised version of the full interview results.

Conclusion and Considerations: The interviews were successful in adding clarity around the overall interest in sharing support for SHAPE commercialisation, and where there might be the most benefit/ need. Although the interviews did not point to one single model for how sharing SHAPE support could work, they did provide a wealth of information about potential barriers and enablers, which has been used (alongside findings from the other data sources) to propose a options for what a shared model could look like in **section 4.**

Discussion

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The project generated a rich dataset, which reflects a high degree of diversity in HEPs' approaches to SHAPE commercialisation, and which vary by the stage of commercialisation maturity, resources, geography, institutional size, disciplinary domains. We originally anticipated a stronger correlation between data and KEF clusters, which was not borne out in the responses to the survey and interview data. As a result, we re-focused the project recommendations from a structured decision tree to documenting the evidence of existing needs and willingness to share the SHAPE commercialisation support in the UK.

The following section summarises our learnings about i) the current approaches to and needs for SHAPE commercialisation and ii) reflections about what shared support for SHAPE commercialisation might look like. Specific recommendations for how to take forward these ideas and design shared approaches for supporting SHAPE commercialisation were discussed and developed at a workshop on 29th April 2025, the results of which are discussed further in **section 5**. See also **Table 4** in Appendix 2, which summarises the findings against each of the original project research questions.

4.1 How is SHAPE commercialisation being supported? And how does that compare to support for other disciplines/ standard support offerings?

The landscape for SHAPE commercialisation support is fragmented and variable. The findings suggest that could be because, as a sector, we are still at the early stages and there is not yet a common established 'best' way of supporting SHAPE commercialisation. The main point of differentiation in how SHAPE is supported is based on self-reported 'maturity level', and there appear to be some differences between Arts specialists and more generalist HEPs. Most (but not all) HEPs reported SHAPE commercialisation was less well-resourced/ less likely to be prioritised compared to STEM.

Answers from survey, interviews and focus groups revealed that the majority of respondents have adopted a broad definition of commercialisation, incorporating other activities such as consultancy beyond the traditional mainstay of patentlicencing and spin-out company creation.

Whilst data from those surveyed, interviewed and in focus groups indicated a similar approach to SHAPE commercialisation as to that for STEM, the interview and survey data allowed greater nuance in the differentiation between SHAPE and STEM projects, highlighting the potential for opportunity around a shared SHAPE support:

- Nuances over language used in the early awareness raising / mindset change process, where the knowledge of the specific HEP and discipline were important for success.
- Less understanding of the markets for social sciences and humanities outputs, which may prompt a greater likelihood of support for consultancies and spinouts.
- More successful commercialisation from some arts specialists who are very close to/engaged with the creative economy – much of which combines the arts with digital technology.
- A shallower but no less pervasive 'valley of death' also impacting on progress of projects through the commercialisation pipeline.
- Resource limitation across the HEPs during the middle and later phases of commercialisation (Value Propositions, business cases, understanding routes to market, nurturing via translational funding, and deal making).

The main point of differentiation in how SHAPE is supported by different HEPs appears to be based on self-reported 'maturity level', which is only somewhat correlated with size of institution. There are, of course, a host of variables beyond institutional size that may inform this self-reported assessment of maturity. Differences in institutional strategy, for example, will underpin variations in what 'good' (and indeed 'mature') looks like. Likewise, variations in access to local or regional resources (funding, partners, incubator support, etc.) and in the degree of an institution's sense of its own 'connectedness' - both to other local institutions and in terms of civic engagement – may all promote a sense of greater or lesser 'maturity' or confidence in the support a HEP is able to provide for SHAPE commercialisation. The influence, if any, of these myriad internal and external variables on both institutional perceptions of the maturity of their commercialisation support and on the support they can practically provide, were beyond the scope of this study but may prove an interesting point of departure for future work. We were, however, able to observe apparent differences between Arts specialists and more generalist HEPs in terms of their support for SHAPE commercialisation.

SHAPE support was more likely to be prioritised by SHAPE specialists or Cluster M HEPs (this answer came out more strongly through the interview process). But overall, survey, interview and, to a lesser extent, focus group outputs highlighted fewer resources going to SHAPE projects within HEPs (compared to STEM), and the use of free and paid for support from external sources where available (e.g. Aspect, ImpactU, UKRI SHAPE Catalyst, UKRI IAA funds). The focus groups also noted that the devolved nations received less external funding than HEPs funded through HEIF.

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4.2 Is there evidence to support the case for sharing SHAPE commercialisation support in the UK?

There is evidence that interventions to provide shared support for SHAPE commercialisation will have a positive impact on UK HEPs; the HEP's that participated expressed a significant need for and strong desire to participate in such (an) initiative(s). However, not all steps in the commercialisation journey may need to be shared, and it possible that this sharing could happen as part of wider shared TTO offerings if due consideration is given to the uniqueness (and relative immaturity) of SHAPE commercialisation in the UK.

The strong impression gained across the survey, interviews and focus groups is that yes – there is both a need and an appetite to further SHAPE commercialisation, and for shared services to provide a means of doing so. This sentiment is driven by practical reasons, such as resource constraints that give rise to the need for efficiency (e.g., in provision of training) and a need to service a growing pipeline where hiring permanent staff is not quick, or in some cases not possible.

But it is also driven by a strong recognition that SHAPE commercialisation as a concept is still in its infancy. With the majority of respondents recognising that they are at the 'seeding' or 'nascent' stages of their SHAPE commercialisation journey, best practice has not yet been established or disseminated widely.

On reading the survey results, and in particular the top identified needs (such as academic staff training and awareness raising, sharing of good practice and access to pre-accelerator and accelerator programmes), one might be tempted to conclude that whilst some sort of shared provision would be both beneficial and desirable, it is not what one might think of as a 'traditional TTO'. However, we argue that the modern TTO – regardless of the academic disciplines it serves – is involved in delivering all these things already, alongside the narrow traditional view of patenting,licencing and spinning-out.

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This also raises an interesting, related question - is there a strong case for a separate shared SHAPE TTO, or is this sharing something that could happen within other shared TTOs? This work suggests that whilst many of the functions of existing TTOs might seem, at a surface level, to overlap, how such services are delivered, and the skills and knowledge required to do so differ from STEM disciplines. For example, programmes like the Aspect Network and the UKRI SHAPE Catalyst (in its former version as ARC) have gathered data on differences that can make SHAPE commercialisation more challenging and/or require specialist knowledge:

- Use of different language and approaches to attract SHAPE academics to commercialisation;
- Less obvious routes to market;
- Likelihood to have a social mission (rather than be for-profit), which affects likelihood of securing investment and potential reach/scale of the impact;
- Likelihood to target government or public sector space (e.g., routes to market in the NHS, education or international development arenas);
- Different partnership or revenue models for ventures in the Arts.

But again – this is not incompatible with the idea of shared SHAPE commercialisation being undertaken as part of general shared TTO efforts. Just as SHAPE is not a homogenous field, STEM commercialisation encompasses a variety of disciplines and routes to market, some of which all but the very largest existing TTOs will outsource to others with domain specialism. We might therefore conclude that the different and overlapping support needs of SHAPE commercialisation (which could also include routes to market similar to a for-profit STEM-based venture) actually strengthens the case for a shared SHAPE TTO to simply be a shared TTO with appropriate expertise embedded within it. This might also make it easier to achieve critical mass, strengthening the potential efficiency savings realised through economies of scale.

So, whilst this work has certainly highlighted the different needs of shared SHAPE TTO services (with particular differentiators being the relative immaturity of the discipline as a whole, differing needs at different maturity levels, and typical routes to market for the social sciences vs. the arts), the modern TTO (and by extension, modern shared TTO) still serves as a useful point of departure. How such a shared TTO might be structured is explored in more detail in **sections 4.5** and **4.6**, but first we explore the barriers and what could be shared.

4.3 What barriers and enablers should be considered?

Funding, resources, confidentiality, and trust were high-level themes identified as potential barriers to sharing, with leadership and government buy-in and the ability to quickly show value seen as critical enabling factors. Whilst some of these concerns can be addressed via operational or strategic decisions about how sharing is done, ultimately it points to a desire for additional resources and funding to get the most value from sharing models, particularly if elements of the process are outsourced to other providers or HEPs for a cost.

A number of factors were viewed as potential barriers but also enablers (if they are overcome) for sharing models and sharing in practice. At a high level, these include:

- **Funding** – from grant funding, to PoC, to acceleration funding.
- **Resources** – almost all HEPs who engaged in this process highlighted their resource constraints (funds, capacity, time), particularly for commercialisation where business cases are more difficult to make.
- **Confidentiality** – around IP, relationships, competition, good practice, etc, for which SLAs and other collaboration agreements will be required.
- **Trust** – for academics and support staff when working with external parties.

Each of the above could prevent engagement with the sharing process, but if managed may also enable sharing.

The point around confidentiality suggests operational questions that are not insurmountable but would require time and thought to ensure they are sufficiently addressed. The complexity of these points will vary depending on what sharing model is deployed.

Regarding the point on trust, there was a sense amongst participants that the relationship building element of commercialisation should remain within the HEP; partly this was for longevity reasons and partly this was about understanding local or organisational context in a way it was assumed other HEPs or suppliers may not be able to. This suggests a need for models whereby some support remains in house, and other elements of the support are shared/outsourced.

Funding constraints appear to be the most significant, as both a gap and a potential barrier/enabler to sharing. This has implications for resources that are available to contribute to or pay for sharing services, the incentives and organisational culture that this scarcity creates, and a potential "SHAPE valley of death" that will not be addressed solely through sharing.

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Approximately half of those surveyed had **no dedicated funding** for various commercialisation activities or staff (for either SHAPE or STEM). The focus groups highlighted a potential implication of this gap in funding: some participants suggested that because there is less access to HEIF-type funding in the devolved nations, there is a push to prioritise commercialisation activities with more chance of generating income (which often excludes SHAPE ventures). Ensuring that this mentality is not carried over into a sharing model would be important to its success.

This sense of being under-resourced was also reflected in many of the concerns raised by participants about how sharing would work, and **the costs that might be associated with a sharing model** was seen as a potential barrier. For the larger "well-resourced" HEPs, even they were feeling stretched in terms of capacity suggested that although they had more resources, they also had larger pipelines to manage. For this reason, many felt the model of larger HEPs outsourcing support to others could not work without additional resources or funding. In addition, the HEPs who would be the beneficiaries of such a model also had concerns about the added costs to them to pay for these services, and where that money would come from. There were also concerns raised about the **costs for setting up a shared support offering**, and the need for long-term strategic support for this to be viable. We discuss in the section on how sharing could work (**section 4.5**) some thoughts about different payment and funding approaches to address this.

Finally, surveys, interviews and focus groups noted a specific gap in **available funding to support SHAPE proof of concept or proof of market stages** and then later when raising investment. It was suggested that SHAPE ventures have an earlier "valley of death" that STEM ventures due to this lack of funding and a need to invest more time in effort (compared to STEM) in identifying the market opportunity for SHAPE ventures. The feedback suggests that even if sharing is put in place if funding and/or expertise to address this specific need is not also tackled, there may still be a bottleneck for SHAPE commercialisation activities.

Other enablers identified by participants included leadership and/or government buy-in, being to make a strong case internally and the ability to quickly demonstrate value. Further detail on the analysis of barriers and enablers is provided in Appendix 2 (**section 6.2.6**).

4.4 What could be shared?

Surveys, interviews and focus groups identified a strong desire for sharing practice and expertise, with the aim of building knowledge across the sector about common routes to market, deal terms, policy and general practice. In addition, the consultation highlighted opportunities to bring in efficiencies of scale around specific areas of the technology transfer process: specialist support in route to markets, more acceleration and training, and proof-of-concept/ proof-of-market funding. The data did not point to specifics for how this sharing might be done, but this could be explored further in the validation workshop, taking into consideration the barriers, constraints and models discussed in the next section of this report.

When drawing conclusions about what support or services a shared SHAPE TTO might offer, we have looked to the **survey and interview questions related to gaps and opportunities** in how SHAPE is currently supported. However, a key constraint for any sharing that emerged from the consultation is that SHAPE commercialisation support is typically viewed as being under-resourced (relative to STEM). And for those HEPs that have been successful in building a pipeline of SHAPE academics interested in commercialisation, this pipeline can then often be stalled because of a lack of resource, funding and/ or expertise in terms of how to take those projects forward. So, any opportunities for sharing must be considered in this context of a resource-constrained sector.

The consultation data suggests **two different types of things that could be shared**: ecosystem-building activities and more 'traditional' TTO activities. The former was most frequently mentioned by respondents and demonstrates a need and interest in sharing practice and knowledge – i.e., building up the expertise and capacity in the sector. (Interestingly, this is partly what the Aspect Network is set up to do and we share feedback in **section 4.6** from the respondents on how the Aspect Network might also be leveraged to better address this need.)

The data also suggests that even if HEPs prefer to deliver commercialisation support at the institutional level (versus outsourcing or sharing the full offering), those people delivering the support would benefit from a more connected ecosystem for SHAPE commercialisation. Specifically, the following **ecosystem-building elements** were identified as having potential for (and value in sharing), which all point to a desire to understand more about 'what SHAPE commercialisation pathways and deal structures typically look like':

- **Peer-to-peer support** – There is not only a desire to learn from one's peers, but the data also showed a strong willingness to share what people already know. This idea of a mentoring or buddy-system has also been raised in other programmes like

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the Aspect Network. However, the constraint has always been about time and resource. Any model for enabling peer support going forward might take this into consideration, suggesting something light touch and easy to engage with. One suggestion was a "directory" / self-serve model where those who are willing to be contacted can share their name and examples of what they viewed as their "expertise", or areas where they are looking for support.

- **Academic training/ awareness raising** – This came through strongly in the survey as something respondents saw value in sharing; however, the data sources also highlighted that most still felt it was important to retain the relationships with the academics within the individual HEPs. We note that some training does already exist in the sector (i.e. Aspect training, ATTP accredited courses on SHAPE commercialisation and other courses from independent providers, and the UKRI SHAPE Catalyst ARC training), but that some of this is fee based, which as noted can be a barrier for many HEPS. Some respondents were also unaware of this existing training, pointing to a different challenging around ensuring information about available resources is better disseminated. More investigation is needed to understand the specific training needs of the sector before specific recommendations on this point could be made.
- **Good practice guidance and policies** – More investigation is needed to understand what types of sharing mechanism would benefit the sector, i.e., beyond what exists such as special interest groups and networks like Aspect.
- **Case studies** -There have been several attempts to address this need in programmes such as the Aspect Network and even before this via projects funded by the ERSC and AHRC that sought to create a repository of SHAPE commercialisation projects. The biggest challenge has been in identifying examples that people are willing to put forward as cases studies; given the consultation finding that the SHAPE commercialisation sector is still relatively immature this may be in part because there are still relatively few examples of "completed" SHAPE commercialisation projects in the UK. Any initiative to develop case studies for the sector will need to take this into consideration, i.e., perhaps the case studies are less about completed projects, and more about examples of projects in the pipeline and the challenges/ considerations that arise when these projects are ongoing.
- **Template documents (legal)** – More detail on what these templates might include is needed, but the data suggests that there is real interest and desire in learning more about how others structure term sheets or contracts, and perhaps some level of

benchmarking on how deals are constructed would be valued by the sector. This could potentially be a repository of templates or (redacted) examples or might in fact be more of a research project to benchmark and gather examples of common practice. This is consistent with findings from other activities in the sector, e.g., the SETsquared Impact IP project, which (though not SHAPE focused) also suggests an appetite for this type of resource.

With regards to **sharing elements of the commercialisation process itself**, the feedback from the consultation seems to suggest that the greatest need is around portfolio development and progressing projects (i.e., identifying the route to market / commercialisation strategy for SHAPE projects). In some cases, this could include resources to hire in support, but sharing models may also need to consider how to upskill the people in the organisation for the longer term. Specifically, the following elements could be shared:

- **Triaging opportunities** – The survey identified a need for assistance with the triaging of new opportunities, particularly where smaller HEPs might lack the expertise for all types of opportunity presented to them.
- **Mentoring and specialist support on routes to market** – This came through strongly in the interviews that there is a "valley of death" for SHAPE projects that comes earlier than STEM, where academics express interest and have an idea but need more hands-on support to develop that idea into a commercialisation plan. Respondents noted that this support is especially needed in the projects involving public sector, arts etc., which require specialist knowledge to navigate the market/ partners or identify a viable route to market.
- **Proof of Concept funding** – Feedback from the interviewees highlighted funding (or lack thereof) as a key sharing opportunity, specifically Proof-of-Concept to Proof-of-Market funding, ring-fenced for SHAPE.
- **IP, legal and misc. business services** – For those who are working towards critical mass, both the survey and the interviews highlighted that their support needs were also evolving. As one would expect, once a HEP has established a growing pipeline and the maturity of projects in the pipeline increases, so does their need for services to help them progress that pipeline.
- **Fundraising/investment advice** – Similarly to the IP/legal/business services need above, as maturity increases, there is increasing need for fundraising and investment advice/support. This may be significantly different to STEM commercialisation in terms of both capital requirements and source of funding.
- **Acceleration services** - The UKRI SHAPE Catalyst programme has been very well-received, and there was a sense from the respondents that what is needed is more of this sort of support. Because the Catalyst has become both very successful and highly competitive, academic demand already significantly outstrips what the current programme can fulfil. In addition, (the accelerator portion of) the model requires a significant time commitment by the academic to be fully effective; there was consistent feedback that workload/time constraints are a major barrier and therefore indirect interventions that can help with enabling and encouraging participation need to be considered a part of any broader solution.

The interviews also enabled discussion of what areas of SHAPE commercialisation would **least benefit** from sharing or be difficult to share. These included:

- Early academic mindset change, particularly because such activities were viewed as requiring a "slow build" to change the culture. The view was that this activity should be delivered internally, even if good practice guidelines and case studies were sourced from a shared service.
- Similarly, early-stage project development/ support and assessment of commercial potential were viewed by some interviewees as being difficult to share.
- When thinking about local ecosystems and geographical nuance – locally, regionally, nationally and internationally – where engagement with local policy makers and end users is important, the view of civic HEPs and organisations with notable place-based impact was that these networks would be difficult to share or to access from a national shared service.

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As part of this consultation, we also sought to understand **where there might be variations** or different support needs. As discussed above (and notwithstanding the many potential variables that were not within the scope of the current study), we found weak evidence of difference across KEF clusters, and only slightly stronger evidence to suggest that needs vary by maturity, size, or previous participation in the Aspect network (see **section 6.2.4** in the Appendix). However, there does seem to be a difference in the needs of Arts commercialisation compared to Social Sciences and Humanities.

The **differences between Arts & Design (vs other SHAPE disciplines)** came through strongly in the interviews, where respondents talked about how many arts academics are already practice-based or engaged in income-generating activities part-time; that models for commercialisation support look very different in these contexts; and that Arts & Design business models and routes to market may be less familiar to traditional TTO teams. Interestingly, the interviews suggested that Arts specialist HEPs who are active in commercialisation were more likely to state they were satisfied with the level of activity in their pipelines, whilst other HEPs were less likely to state that they were satisfied. In addition, Arts specialists who are very close to /engaged with the creative economy reported more success in commercialisation, much of which combines the arts with digital technology. This does not necessarily suggest different types of shared TTOs are needed for Arts & Design, but it does suggest a shared TTO may need to be able to cater to a wider variety of projects.

In summary, the consultation highlighted some specific areas of need, where sharing good practice or sharing SHAPE TTO support activities were perceived as beneficial by the sector. In **section 4.5** we talk more about how a shared TTO might need to operate, and also about which of these activities are best provided by a shared TTO, and which can be provided by other ecosystem interventions or shared capabilities of some sort.

4.5 How might shared approaches operate in practice?

Although the consultation found more or less positive perceptions of most approaches to sharing support, no single model emerges as a clear favourite. There seems to be a case for some degree of central (possibly national) coordination to shared SHAPE TTO services; however, the findings suggest there may be greater value in sharing parts of the TTO process, rather than adopting a model designed to support across the whole process. We suggest some mechanisms for how the individual parts could be shared in this section and invite further discussion and development of specific mechanisms at the April 2025 workshop and validation event.

As mentioned in **section 2.2,** the original project proposal included thoughts on different 'sharing models' for a SHAPE TTOs, which could be explored during the consultation. These included a mixture of approaches such as ways for sharing commercialisation services (e.g., outsourcing support to another organisation or having one HEPs lead or provide services for others), ideas for leveraging collaborative STEM initiatives to better include SHAPE, and mechanisms for people-development (e.g. through shadowing or secondment). In addition, the Literature Review highlighted other models but mainly those for sharing TTO services (share equally, hub and spoke, shared services hub, and procurement frameworks).

The consultation findings are clear that there is no single right answer for how the sharing of various aspects is achieved. Whilst, as previously discussed, there are differences in preferences by maturity stage and type of HEP (particularly arts specialists versus those with a broader disciplinary mix), and more or less positive perceptions of various sharing models, **no single model emerges as a clear favourite.** The consultation does, however, suggest why some of these models may (or may not) work well.

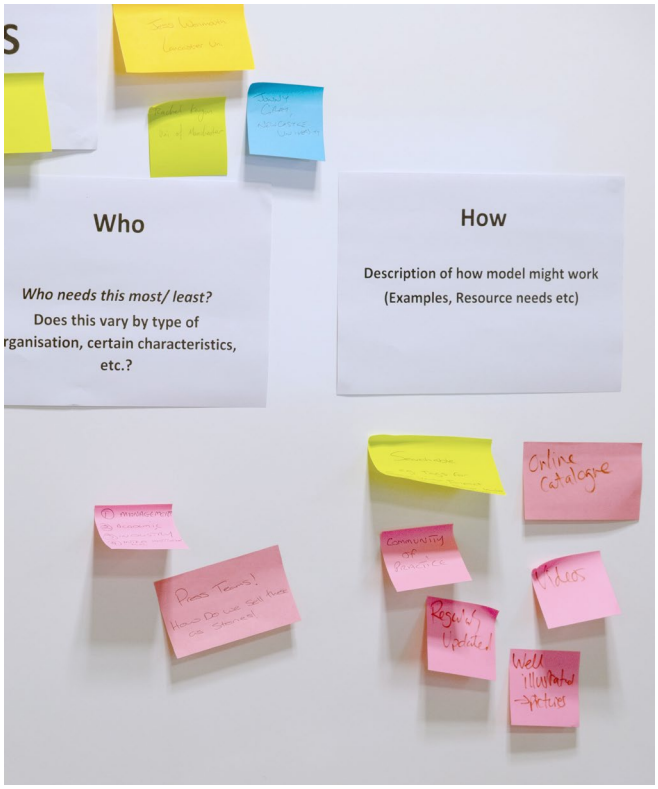
Two specific hypotheses this project sought to explore were:

i) Whether larger (or better resourced) HEPs might be willing to share to support spinout activity in smaller HEPs, and what terms and conditions and/ or incentive or reward schemes would need to be in place for them to do this; and

ii) Whether it Is preferable to share capacity at regional level, by specialism, or by some other means at sector level.

For the former, this was viewed as least attractive of all the models presented in the survey (only 33% rated it as somewhat or highly attractive), and concerns were raised about how larger HEPs were already resource-constrained and would not have capacity to take on more support, as well as operational concerns related to IP ownership, confidentiality, and relationships that were relevant to any of the models. However, there was an openness to considering this if funding were available. For the latter, considerations were shared for when geographic or specialism models might have value, but again there was not a one-size-fits all solution emerging. See **section 6.2.5** in Appendix 2 for more on both these points and the feedback provided, and **section 6.2.6** in the Appendix for more details on barriers, enablers and constraints.

How, then, should the sector proceed? Returning to the original motivations for the funding call under which this project was funded, it is important to consider which models will deliver on the promise of i) boosting the commercialisation of university research through spinning-out and other mechanisms and ii) given the resource constraints faced by the sector, doing so in the most efficient, impactful and cost-effective way possible.



Outputs from the project's Validation Workshop, 29th April 2025

Considering these motivations (and given the relatively low level of maturity of SHAPE commercialisation and lack of common approaches) **there seems to be a case for some degree of central (possibly national) coordination to shared SHAPE TTO support/services**. One model may be a mixed model of regional collaborations, with specialist advisers providing support nationally, and some type of national hub coordinating efforts around good practice sharing. This could be underpinned by a national common offering providing, e.g., training, good practice models/ documents/policies, and accelerators (e.g. UKRI SHAPE Catalyst). Though regional, these hubs would have a large virtual component (particularly for training provision). They may also help to facilitate collaborations with industry and the public/third sectors.

There may also be value in exploring the potential to **better integrate SHAPE into existing STEM TTOs**. That could take the form both of upskilling TTO staff already well versed in STEM commercialisation to be able also to support SHAPE researchers, and/or of finding new and better ways of integrating SHAPE research insights into STEM-based commercialisation projects, such that the resulting products, services or processes draw on insights from (and return benefits to) research in both fields.

Finally, another takeaway from the consultation is that the list of activities that were deemed most valuable for sharing (**section 4.4**) strays into things that do not all look like 'traditional' or core roles for a TTO. It begs the question as to whether the real requirement is for mechanisms to share expertise and problem solving, rather than to sub-contract specific services. An approach based on shared problem solving could run for free, or HEPs with more capacity could choose to charge consultancy rates to those with less that want advice, and this could evolve into totally free services and a 'playbook' or towards more formal shared services. However, at current most of the HEPs we engaged with indicated they would not have capacity to offer services to others, due to their own resource constraints, and it's unclear that charging for the service would alleviate this without other internal changes (i.e., to their targets or objectives).

This list also suggests there may be a greater value in sharing parts of the TTO process, rather than a model focussed on sharing the whole process. To this point, Table 1 outlines some initial ideas and ways in which sharing could potentially happen for the *individual activities.* It is worth noting that most of the suggestions could be fulfilled in most of the sharing models proposed above, although at 'higher resource requirement' end of the spectrum, where some type of national coordination/oversight is generally indicated. This may sit within some kind of national SHAPE commercialisation hub, or within existing structures such as sector bodies or funders. **Appendix 3** contains additional thinking on these points, which were further explored in collaboration with the sector at the April workshop in order to inform our recommendations.

Outputs from the project's Validation Workshop, 29th April 2025

Table 1: Initial ideas for how the activities/ needs identified in the consultation might be *individually* addressed through sharing models. (See **Appendix 3** for further discussion and explanation of these ideas)

Activity/Need	Model(s)	Example of this Model	Resources	Risks	Mitigation
1. Peer Support	• Informal, ad-hoc networks based on existing collaborations	• KEUK Special interest groups • Aspect Communities of Practice	• Low to Medium	• Time and willingness of people to contribute; • Confidentiality concerns; • Requirement to build a critical mass before it becomes useful; • Overlap with existing networks	• Platform to ensure burden of providing support is shared equitably.
	• A national database with active community engagement	• Alumni networks with a "matching" function (e.g., for career/ entrepreneurial advice)			
2. Case Studies	• Informal sharing	• Aspect Knowledge Shares	• Low to Medium	• Willingness of people to contribute; • Confidentiality concerns; • Lack of confidence/ lack of completed "successful" examples in the sector	• Recording them as presentations (to capture talking points). • Using a model of "share to receive". • Providing oversight / coordination to help those with projects articulate/ extract relevant points suitable for the intended audience.
	• National repository with standard template/ coordination process for gathering case studies	• AUTM deal terms library			
3. Good practice & policy sharing	• Informal, ad-hoc networks based on existing collaborations	• KEUK Special Interest Groups	• Medium to High (depending on level of ambition)	• Difficulty of gaining consensus given maturity level and wide range of potential ventures; • Reluctance to adopt policies created for other institutions/contexts.	• Documents are not presented as 'best practice' but as a means of shortcutting creation of new documents. • Access to people (to further explain rationale) helpful – could be integrated with peer network activities.
	• National database with active community engagement	• Aspect members' hub with outputs from funded projects			
4. Template documents	• 'Bottom up' - A repository of documents similar to 'good practice and policy sharing'	• KEUK special interest group informal exchange of documents • SETsquared Impact IP project	• Low to High • (depending on level of ambition)	• Resource requirements; • Willingness of people to contribute; • Confidentiality concerns; • Inability to reach consensus; • Low adoption; • Ongoing burden of maintenance.	• Could try blended approach – start with 'bottom up' repository of internal-facing documents, then undertake work to analyse common practice to develop templates, and expand to external facing ones (e.g.,licencing agreements). • Leverage AI to complement/ support this (this is being explored to a certain extent through at least one of the other CCF-RED projects)
	• 'Top down' - sector-wide effort to agree on and adopt standardised templates	• Brunswick or Lambert agreements;			
5. Academic training/ awareness raising	• Jointly designed and delivered training/ awareness offering	• Aspect training programme (needs are jointly defined by members, then courses designed and delivered at scale through contracted suppliers)	• Potentially High • (Coordination to elicit needs, then content creation)	• Hard to address needs of a diverse range of HEPs at different stages of maturity; • Insufficient tailoring to their specific context; • Scheduled courses vs the need for something at a specific point in time (to be able to progress a project). • Practical need to cap the number of people attending training in order for those sessions to be effective; • Need for TTO staff to be upskilled alongside academic staff.	• Prioritisation of most common/pressing training needs; • Provision of material (and not delivery of the material) to allow local tailoring, thus preserving cost saving, given the significant development time/cost for new training material; • Recorded or self-paced learning options
	• Funding for HEPs to access (and more awareness raising of) existing SHAPE training offerings	• IAA funding has allowed many HEPs to access bespoke or existing SHAPE training offerings, including that provided by the Aspect network, and independent providers			

Activity/Need	Model(s)	Example of this Model	Resources	Risks	Mitigation
6. Specialist support	• (i.e., triaging opportunities, mentoring on routes to market; IP/legal advice; fundraising advice / access to investors) • Procurement framework/pool of advisors	• Other shared services models/ framework agreements (e.g., Growth Hub, Oxford University Innovation legal services)	• Medium to High • (Requires coordination and set-up, plus ongoing management of suppliers)	• Cost and effort of initial set-up. • Variability in quality of advisors/ mentors.	• Higher initial set-up effort (and requirement for a procurement framework to be 'owned' by a legal entity) could be mitigated by starting with a voluntary directory of suppliers, although this could reduce the promised cost-savings.
7. Acceleration services	• Expansion and/or adaptation of existing pre-acceleration and acceleration programmes (e.g. UKRI SHAPE Catalyst) to address specific needs/ gaps • Development of 'train the trainer' models to allow individual HEP"s to run internal (pre-) accelerators i.e., through the TTO or other on-campus enterprise initiatives • Expand or collaborate with place-based initiatives to enable better access to business community to create company founder networks.	• UKRI SHAPE Catalyst • SETsquared • Numerous public and private providers	• High	• Academic workload presents barriers to participation. • Suitability for wide range of potential SHAPE ventures. • Medium to high resource requirement for participating HEPs, where TTO staff are required to participate and or deliver services.	• Alignment of enterprise with impact activities to incentivise HEP leadership to encourage participation.

4.6 How else could SHAPE commercialisation be enhanced in the UK?

The consultation suggests some changes that have value for the sector, but that could be delivered via interventions other than a shared TTO model. Other existing collaborations and networks identified during the consultation may also represent opportunities for sharing by expanding or leveraging these.

The list below highlights three commonly cited opportunities, which could be addressed through joint applications for funding, in consultation with the existing providers or these services, or through new funding programmes or initiatives led by UKRI, Research England or funders in the devolved nations:

- **UKRI SHAPE Catalyst** (delivered by ARC) – Respondents noted how valuable the pre-acceleration and acceleration offerings have been, strongly indicating there is a need for a) even more of this and b) a need to reduce barriers to engagement.
  - **Increase the number of seats** - Respondents suggested expanding the size of the cohorts/ running more cohorts. Specifically, they mentioned the Catalyst has been so successful, that earlier-stage or less scalable projects are less likely to win a space on the accelerator. A cohort focused on high-impact sustainable ventures, rather than only investable/scalable businesses could be one way to do this.
  - **More enabling environment** - Respondents suggested that academic workload is a barrier to engagement; cultural or technical adaptions should be considered which might include additional flexibility; and/or offering a different type of support (e.g., the specialist project support mentioned previously.)
- **Aspect Network** – The Aspect Network is intended to address the capacity building and knowledge sharing needs highlighted by respondents, and participants suggested that some tweaks to the Aspect model could add a lot of value to the wider sector.
  - **Increase awareness** - Some respondents were not aware that Aspect exists; this prompts the

question of how it might be better communicated across the sector as a national asset and resource.

- **Offer a free version** – The issue of budget constraints (and the challenge of convincing leadership to invest) will prevent many participants from joining, despite Aspect fulfilling a potential need for many. Whilst we acknowledge a fully free version is not sustainable for the Aspect model, if external funding were available to fund some free places that could make the programme more accessible to others.
- **Make the resources more accessible** – Several participants noted that whilst they are aware that Aspect has generated a large volume of research, insights and resources, they find it very difficult to find and navigate. A strong suggestion was that improving access to existing and publicly available resources would be a quick win.

- **Social enterprise support** – Collaborative/ shared initiatives such as ImpactU are already focused on sharing practices and building capacity in the sector around social enterprises. It should be considered if some of the needs highlighted in this report could be addressed in collaboration with or through leveraging the knowledge or networks of these existing initiatives.

4.7 Funding considerations

Funding was repeatedly highlighted as the biggest barrier to any sharing approach. The majority of those interviewed suggested that they would like to see a fully funded offering in the first instance, potentially shifting to a sustainable self-funded model over time; a partially funded model with tiered or size-based fees for participants was also suggested. The April workshop will also include a focus on what could be achieved with low or high amounts of resources and funding.

As mentioned in previous sections, a common theme in the stakeholder consultation was that TTOs feel they lack resources and funding for SHAPE commercialisation, compared to their STEM equivalents. The majority of HEPs interviewed have very limited resources for SHAPE commercialisation, with many noting projects stuck in portfolios because of the lack of resource, expertise and understanding of the markets to support them.

This came up again when respondents were asked their views on potential barriers, enablers and incentives for sharing models to work. Funding and resources where the most commonly mentioned points (see **section 6.2.6** in the Appendix for further analysis of these points). The majority of those interviewed suggested that they would like to see a fully funded offering in the first instance, potentially shifting to a sustainable self-funded model over time. And whilst most respondents expressed a strong desire to engage in creating something shared for the benefit of the sector, time-constrained respondents expressed worry about investing their own time setting up a sharing model without some wider or higher-level commitment to its longer-term sustainability and continuity.

Below provides more details on the funding models suggested by respondents. These options were explored further as part of the Validation Workshop, and considered alongside the sharing model options set out in **section 4.5.**

- **Fully funded** – External funding to set-up and operate the sharing model, with the potential shift to other funding sources longer term. This addresses a constraint noted in the Interviews that it can be very hard to make the case internally that investment in SHAPE specialist support is worthwhile to the HEP (longer-term societal and economic impact is a harder case to make to leadership). This initial funding would also help in creating a culture change by demonstrating value of HEP commercialisation, and the case for ongoing support.
- **Size based** – A subscription model with funding input based on numbers of staff. This would enable those HEPs with smaller teams/ pipelines/ budgets to participate in sharing. A potential risk/ unknown is whether larger HEPs would see the value in contributing more, and that numbers of staff may not correlate to pipeline; and that HEPs with greater SHAPE commercialisation maturity levels (self-reported) may not need the same services as those who area earlier stage.
- **Tiered** – The model offers some free provision but a fee structure for particular activities. For example, sharing of resources or some level of participation in training could be free / included; but access to specialist project support might be paid for as it is used. A risk to be explored is how to ensure there will be enough funding to cover ongoing overheads for coordination of the activities.

Conclusions and Next Steps

5.1 About the Validation Workshop

As mentioned in **section 2.3**, this report was used as the foundation for a 'Validation Workshop' with the sector on 29th April 2025, where feedback was sought on the findings and solutions presented in this report, to co-create recommendations for the sector.

Through our research, we devised a list of seven SHAPE commercialisation activities that were viewed as gaps for the sector *and* would benefit from shared approaches. However, the research did not provide details on the scope of *what* might be included in each, and *how* each could be delivered in a shared way. The sessions at the event were structured so as to further scope out each area of need, and move further towards a possible mechanism for sharing, asking participants to consider how this would vary if they had either a high or low amount of resource. See **Box 3** (Appendix 4) for a copy of the event agenda.

The Validation Workshop was attended by 30 participants, including the six project partners. **Table 3** presents a summary of the proposals generated for each of the shared activities, with additional notes from each of the group discussions in **Appendix 4**. In the remainder of this section, we discuss our overall conclusions and next steps emerging from the workshop.

5.2 Reflections on sharing approaches

Overall, there was broad agreement with the findings in the report and much enthusiasm and interest in progressing this initiative for sharing SHAPE commercialisation support.

The interventions identified in the report can benefit the sector.

Participants broadly agreed that the list of sharing activities/ interventions identified by the project are accurate and relevant for the sector but noted the priorities within the list could vary depending on the specific context of each participant's role and institution. In terms of priorities, participants were able to self-select which interventions they wished to discuss during the workshop. **Table 2** shows the numbers of participants who chose each topic. Although those with lower numbers of participants could be interpreted as being of lower priority, this may not represent the full picture. For example, although 'good practice and policy sharing' and 'template documents' were not selected for discussion, this might be because these are topics that could be incorporated into some of the other interventions, or because they were perceived as having a low barrier to entry and easier to accomplish.

Table 2: Number of participants per breakout group

Intervention	# Participants (including facilitator)
1. Peer support	5
2. Case studies	4
3. Good practice and policy sharing	0
4. Template documents	0
5. Academic training/awareness raising	5
6. Specialist support	10
7. Acceleration services	4

An integrated approach will have even greater impact.

Many of these activities overlap, and there was a feeling that they would have less impact if implemented alone and should be aligned with other shared activities for maximum effect (e.g., case studies, training, acceleration and peer-to-peer networks). We also suggest that any solutions put forward by the workshop participants must take into account some of the key barriers and enablers highlighted in **section 4.3** (with more detail in **sections 6.2.6** and **6.2.7**, Appendix 2). Some of these require change at the ecosystem or institutional culture level and therefore are enabling factors for wider systemic change that must be taken into consideration for any solution that is designed.

Centrally supported, but locally delivered model may work best.

Regarding how sharing might happen, participants agreed with the notion something nationally developed and supported, whilst also noting that certain activities may require further adaptation to local realities, such as culture, strategy, and language. Regardless, and to be sustainable, participants felt any shared SHAPE commercialisation offering should prioritise upskilling academics. This means not doing commercialisation *for* them, but rather, doing it *with* them. By also providing academics with tools or "self-service" access to support, this will serve to increase SHAPE commercialisation capacity across the sector.

5.3 Reflections on next steps

'Task and Finish Groups' and 'Pilot Projects' are practical next steps.

Although not discussed explicitly during the workshop, for most of these interventions, the discussions imply a 'task and finish group' may be needed to progress the next steps listed in **Table 3**. These include identifying organisations who might lead or 'house' the intervention, further scoping out the offering, and/or applying for funding to implement the solutions. Several participants at the event indicated they would be keen to be involved in taking these ideas forward; however, having buy-in from leadership at their organisations would be a critical enabler for this to happen.

But, funding and time will be barriers (or enablers) to progress.

The group discussions suggest that for some activities – specialist support, acceleration, and training – these would not be feasible or successful without further external funding to purchase in support. Other activities could in theory be more easily be progressed without external funding, such as a peer support and case studies; but this would require an organisation or individual to step forward to lead the initiative, and for other individuals to volunteer time to make this happen. However, participants noted that internal resource is already very limited (as reflected in the findings in this report), and although they felt some of these interventions could be done in-house, it would require having funds to hire (or buyout time) to develop or deliver the intervention internally. Furthermore, the impact of any of these initiatives would be amplified if there was further funding to buy-out academic time to get involved in commercialisation and engagement, building up SHAPE expertise across the sector.

These findings should inform the approaches taken in other sharing models.

It is also worth reflecting on how the findings in this report might link to other CCF-RED projects on shared TTO models. Many of these inventions for sharing SHAPE support are about building a pipeline of commercialisation projects, which could then go on to be supported by a shared TTO model. Participants reflected that TTOs need to have a certain amount of internal knowledge and resource to be able to identify and then support SHAPE academics to the stage that their projects can benefit from a shared TTO. This is viewed as a critical recommendation coming from the project.

Participants at the project's Validation Workshop, 29th April 2025

5.4 Key takeaways

In summary, workshop participants validated the following findings in the report, about the nature of the SHAPE commercialisation landscape, and interest in sharing SHAPE commercialisation support:

1. SHAPE commercialisation remains largely nascent/ immature at most HEPs.
2. There is a strong need and desire by a broad range of HEPs for more and better support in order to more effectively commercialise innovation from SHAPE research.
3. There is a strong willingness to engage in shared approaches between institutions but this is tempered by concerns stemming from resource limitations regardless of the stage of maturity.
4. There is strong potential for a number of different interventions to make tangible positive impact and that these can be implemented through shared approaches.

Participants also provided insights on critical enablers and barriers to sharing SHAPE commercialisation support:

5. The culture at any individual HEI is a critical factor for implementation of any intervention; shared approaches should ideally be centrally developed/managed but delivered locally – enabling relationships between KE practitioners and academic/research innovations should be a key part of any strategy.
6. In the absence of additional funding the impact of any approach will be significantly limited; there is insufficient capacity in the current system to deliver impact at-scale with existing resources.
7. It is critical for Research England to view the output from the Shared TTO programme holistically and seek to engineer an ecosystem-level programme that enables the different interventions to work effectively together, as proposed in **Figure 2**.

Figure 2: An ecosystem approach to sharing is critical build the pipeline of SHAPE commercialisation in the UK. As projects progress in maturity level, their access to shared resources becomes more competitive, and sharing approaches are likely to vary at each stage as a result.

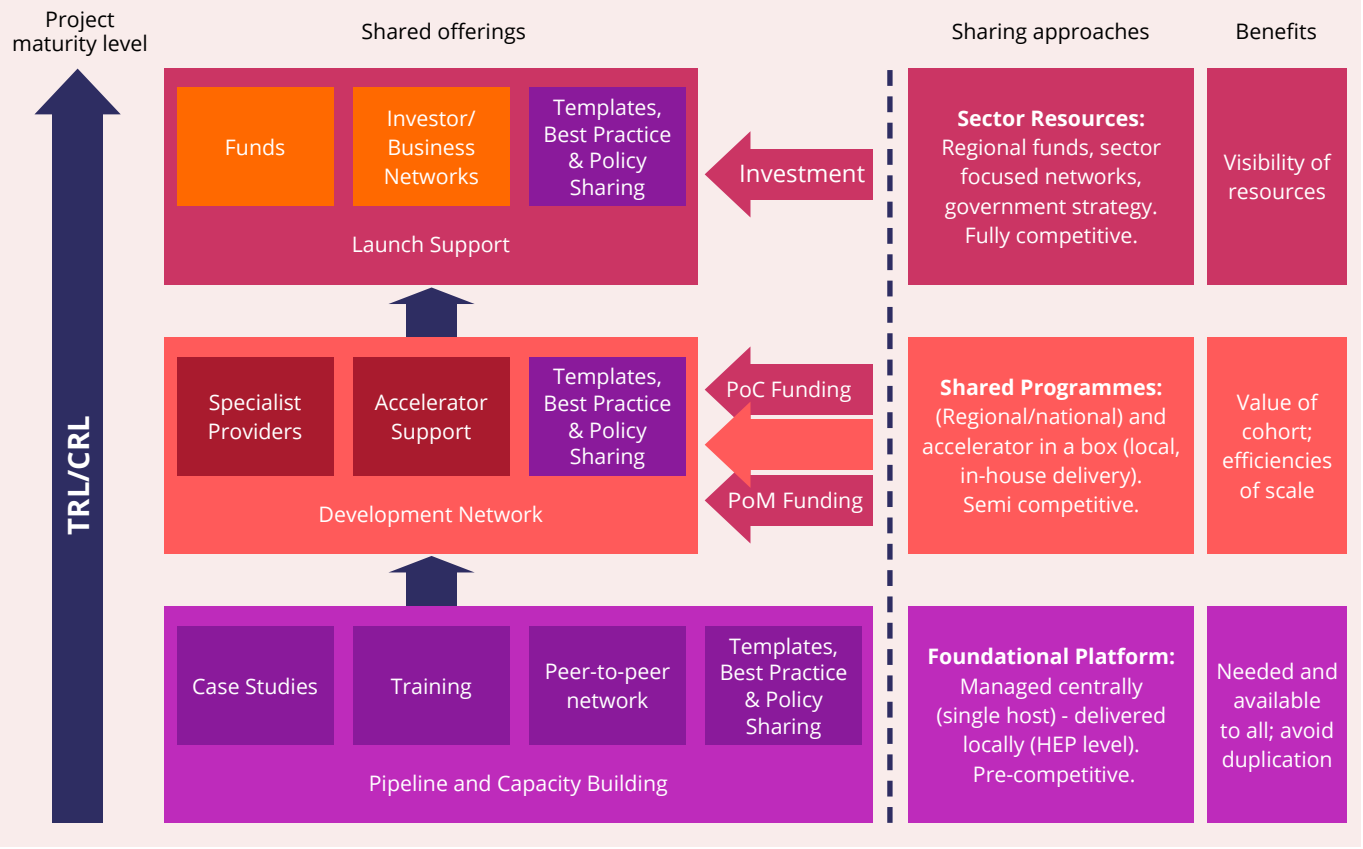


Table 3: Summary of proposals generated during the Validation Workshop and suggested next steps (See also **Table 1** and **Appendix 3** for the original proposals)

Activity	What	How	Enablers	Validation	Next step
1. Peer Support	One or more peer-to-peer support groups/ communities of practice for academics or professional services staff (i.e., arranged by role, discipline, etc.)	Build on existing networks (ARMA, Aspect, KEUK) for professional services, or on cohort programmes like UKRI SHAPE Catalyst for academics); Some kind of collaboration platform to allow connections (lower resource could be LinkedIn or existing networks; higher resource could be built community platform software).	Support from senior leadership important for legitimacy. If it sits outside sector bodies, would need to apply for funding for some sort of central coordination, travel, etc. The solution has to be more than an online Forum. Whilst online peer forums exist for SHAPE, there is a "vulnerability barrier" that prevents people from reaching out.	**Yes:** Participants confirmed this intervention has value. There was good alignment with approach proposed in Appendix 3. Did not discuss the proposal for a "database" or directory of peers that could be called on in an ad-hoc way; however, this could be enabled by the community platform too.	**Task and Finish Group:** Find a "home" for this - an initial next step could be to sound out existing networks/ sector bodies to see if they could take this on.
2. Case Studies	A managed searchable online resource with some level of quality control and ideally augmented by AI tools to help check.	HEP's contribute case studies and volunteer time to quality control and manage the library. Using IAA funds, commercial sponsorship, or voluntary time. Apply for CCF-like funds to create a more sustainable solution.	Case studies will have lower impact if implemented alone and should be aligned with other programmes such as training and peer-to-peer networks for maximum effect.	**Yes:** Participants confirmed this intervention has value. There was good alignment with approach proposed in Appendix 3; however, preference was for a more formal repository vs informal knowledge sharing. Did not discuss barriers presented in the report (e.g., learnings from past projects to create SHAPE case studies – see Appendix 3, **Box 2**).	**Task and Finish Group:** Figure out an "accountability structure" to encourage participation / address challenges identified in previous projects (i.e., a requirement from funders?) This may be dependent on finding a host organisation or "home" where the resource will be maintained as that may inform how the structure is designed; and/or could be linked to whatever solution is developed for the Training intervention (see below).
3. Good practice & policy sharing	Not discussed	Not discussed	Not discussed	Unclear if this intervention is a priority.	**Reflect:** Consider if this requires a separate intervention or can be incorporated into the other activities.
4. Template documents	Not discussed	Not discussed	Not discussed	Unclear if this intervention is a priority.	**Reflect:** Consider if this requires a separate intervention or can be incorporated into the other activities.

Table 3: Summary of proposals generated during the Validation Workshop and suggested next steps (continued)

Activity	What	How	Enablers	Validation	Next step
5. Academic training/ awareness raising	Training hub offering training for SHAPE researchers at various career stages, covering topics such as: • Key routes (spinouts,licencing, consultancy etc.) • Commercialisation basics (e.g. what is IP, what is commercialisation) • Legal aspects • IP management, protections, types, ownership • Roles, responsibilities, time requirements and support • Multidimensional partnership landscape • Case studies and examples	If lower resources, codifying and classifying knowledge. A platform or website with online resources, e.g., codified resources, online training modules, templates, case studies, etc. Could start by making existing offerings (like Aspect) easier to find and use. If higher resources, could support more advanced stages of commercialisation (e.g., tailoring training to specific disciplines or HEPs, or including workshops, upskilling professional services, etc.)	It would be important to offer training for other stakeholders involved in TT/ commercialisation to build capacity, buy-in and alignment (e.g., senior management, professional services, industry partners, local partners/ SMEs). Even with the lower resource model, an organisation or volunteers would have to take the lead to make existing content searchable, classified, etc.; and others maybe have to volunteer to share other resources.	**Yes:** Participants confirmed this intervention has value. There was good alignment with approach proposed in Appendix 3; however, the group identified that there is a need to also invest in professional services (i.e., a "train the trainer" approach) and identified an opportunity to codify and classify existing materials as a starting point.	**Pilot:** Secure funding for small scale project for one area of a shared TTO function (e.g., consultancy) to create a national resource. This might include: • To collate, classify, codify materials for professional services (e.g. policies, strategies, case studies, incentives, templates). • To collate existing resources and/or design new training and resources (e.g., "how-to-guide") oriented towards the SHAPE academics' learning needs.
6. Specialist support	Access to industry experts for validation was identified as the biggest need (NB the original research also suggested legal support and other specialist advice.)	Many potential models, including peer support from other HEPs, EiR, leveraging alumni, KTP-like model etc. Did not discuss how these models might work in a shared way.	Must be done at the level of national/ regional hubs, and unlikely to happen without funding. Requires buy-in support from the top.	**Yes:** Participants confirmed this is a need – this topic was selected for discussion by the largest number of participants. However, the biggest need is to find experts with sector experience and/or the ability to provide mentoring/ market validation; IP or legal expertise is something they feel they could access through existing networks. Did not discuss the idea of a pool of experts/ negotiating discounted rates proposed in the report.	**Task and Finish Group:** Explore if there is value in this as a shared offering, and if so, how sharing could work. Individually, HEPs would need to identify how they could carve out time to build these networks; collectively a way forward may be to explore how this could bolt onto or diversify what is already offered by networks like ARMA, KEUK etc. (i.e., could this be a 2-day conference geared towards connecting people to specialist support; a directory; etc.)
7. Acceleration services	Consolidate and expand on current offerings such as UKRI SHAPE Catalyst and iCURE, and increase access (to meet demand) by funding centrally and removing barrier to participation.	Cohort learning is a big part of the value of acceleration – the benefits are peer learning, accountability, and helping academics to build their teams. Could be done at regional or cross-institution level if funding could be found and to enable an anchor institution to lead on behalf of a group.	Will require external funding; Translational funding will also be required (in parallel), as it's currently insufficient to meet expectations of impact from commercialisation. Incorporate or align with case studies and training to minimize overlap and create a more comprehensive offer.	**Yes:** Participants validated the findings in the report.	**Funding:** There are already offerings that work well, but funding is needed to expand and adapt these.

Appendices

6.1 Appendix 1: List of supplemental materials

This document, along with the following materials, will be posted on a dedicated page on LSE's Research and Innovation website at the end of this project.

- Literature Review
- Survey Questions
- Survey Results - Slides
- Focus Group Results - Slides
- Interview Results – Slides

6.2 Appendix 2: Triangulation of the consultation findings

The section below compares the findings from the three consultation data sources. Note that links to the original analyses with detailed charts can be found in **Appendix 1**. **Table 4** summarises the findings against each of the original project research questions listed in the introduction to this report.

Table 4: Summary of findings per project objective

Original Project Objectives / Research Questions	Summary of Findings
1. What does commercialisation/ spinout support look like in different HEPs?	This was a contextualisation question, to understand how SHAPE support differs, and to understand if needs vary based on certain characteristics of the HEPs. Summary takeaways are in **section 4.1**, with further details in **section 6.2.3**.
2. Where do HEPs feel they have significant capacity and capability gaps or could support the biggest gains?	Survey respondents were asked where they had the biggest gaps, then also, where they saw the most benefit in sharing. Interviewees were asked similar questions. Training was viewed as both the biggest gap, and most likely to benefit from sharing. Other areas were also highlighted, and there was some variation in need based on maturity of a HEP's SHAPE commercialisation support. **Section 4.4** discusses more about this, with detailed findings in **section 6.2.4** below.
3. How much and what sorts of resource larger (or better resourced) HEPs might be willing to share to support spinout activity in smaller HEPs, and what terms and conditions and/or incentive or reward schemes would need to be in place for them to do this?	This model was viewed as least attractive of the models put forward in the survey (33% rating it highly or somewhat attractive), and concerns were raised about how even larger HEPs were already resource-constrained and wouldn't have capacity to take on more support. However, there was an openness and interest in exploring this and the other models. **Section 6.2.5** has more detail
4. What are the most significant challenges and benefits that both large and small HEPs perceive in sharing TTO functions and the key factors for consideration when assessing possible solutions?	Resource constraints was the most commonly mentioned barrier – both in terms of time and funds. Other barriers or concerns included lack of funding for SHAPE commercialisation projects; IP ownership, confidentiality and legal considerations; trust/relationships with academics, and leadership. Benefits and incentives included building capacity, lowering costs of shared services, government or leadership buy-in and others. More on these findings are in **section 6.2.7**.
5. Which model(s) of sharing a range of TTO functions are deemed feasible, viable and desirable, and what conditions would need to be met to start implementing one or more of these models?	There were more or less positive perceptions of most approaches to sharing support, but no single model emerges as a clear favourite. See **section 6.2.5** below. In **section 4.5** we also discuss some initial reflections on how sharing might work and suggest this is developed further at the workshop on 29th April.
6. Is preferable to share capacity at regional level, by specialism, or by some other means at sector level?	We hypothesised that there may be similarities in HEPs need based on characteristics such as KEF cluster or size but could not find an obvious link in our data. The interview results highlighted some benefits and considerations related to geographic or specialism sharing but again, there was not a one-size-fits all model. More details in **section 6.2.5** below.

6.2.1 About this analysis

This analysis comes from the outputs generated during the stakeholder consultation and using three approaches:

1. An online survey analysis with responses from 52 individuals representing 45 institutions with all KEF clusters represented.
2. A semi – structured interview process with 53 individuals representing 40 institutions, again with all KEF clusters represented.
3. A series of focus groups, one each held in Scotland (10 HEPs), Northern Ireland (1 HEP), and Wales (3 HEPs).

The detailed breakdown, charts and analysis of outputs from each part of the consultation are available in the presentations/ slide decks provided for each activity (see list in **Appendix 1**). These outputs have been triangulated/ compared to better understand the overarching takeaways/ answers to each of the key questions asked and to highlight areas where there may be similarities or differences in the data/ feedback provided.

This analysis is grouped by the following headline themes:

- About the participants and process
- Approaches to commercialisation and SHAPE commercialisation
- Gaps and opportunities
- Thoughts on sharing approaches
- Barriers, constraints, enablers, and incentives
- Final thoughts and key takeaways from stakeholders

The survey and interviews both engaged with 40% or more of the target HEPs, meeting the target for each process. Taken together these consultations engaged with ~45% of the KEF cluster HEPs, with the greatest number engaged with in Cluster V and the lowest proportion (30%) from Arts specialists.

Interviews provided a greater level of in-depth nuance to the consultation, though as a semi-structured interview, they should not be viewed as quantitative, rather they provided good qualitative outputs.

Fifty percent of the HEPs invited to take part in the devolved nations focus groups did so.

The majority of those engaging in the process were in leadership positions or providing hands on support (>95%).

6.2.2 About the participants

Participants engaged with the consultation through, 1) an online survey, 2) semi structured interviews, and 3) focus groups held in the devolved nations. The following questions were asked about each participant.

Research Theme: About the participants.

This is mostly a baseline question to understand who was responding. This may also provide insights on: Are there any trends in the role or seniority of respondents, and how they answer the questions?

Survey Questions

About you:

- **Q1.** Name of University
- **Q2.** Are you responding as an individual or on behalf of your institution? (If you select "institutional", please then skip to question 5.)
- **Q3.** If you are responding as an individual, which most closely describes your primary area of work?
- **Q4.** If you are responding as an individual, which of the following most closely describes your position?

Interview Questions

About you:

Can you tell us more about your role at [your organisation], and your responsibility for/ involvement in SHAPE commercialisation at your organisation?

Focus Group Questions

None asked.

Some HEPs engaged with the survey and the semi-structured interviews, therefore this stakeholder consultation process engaged with, in total, 63 HEPs, representative of all KEF clusters and of 45% of the total number of HEPs in the UK.

Table 5: Target vs actual number of HEPs that engaged in the consultation process.

# HEPs per KEF Cluster		# HEPs Engaged (Target)	# HEPs Engaged (Actual)			
KEF Cluster	**Count of HEPs**	**40% of KEF cluster**	**Surveyed**	**Interviewed**	**Total # HEPs surveyed and/or interviewed***	**Total % KEF Cluster Survey and/or Int**
Arts	26	10	5	7	8	30 %
E	33	13	12	11	15	45 %
J	14	6	5	4	6	43 %
M	18	7	4	3	7	39 %
STEM	12	5	3	2	6	50 %
V	18	7	8	7	11	61 %
X	18	7	8	6	10	56 %
Total	**139**	**56**	**45**	**40**	**63**	**45 %**

*Some HEPs took part in both consultation processes.

At least 50% of Clusters V (61%), X (56%), and STEM (50%) were engaged with through this process, with lower percentage engagement from the Arts specialists (30%), M (39%), J (43%) and E (45%).

The universities taking part in the survey were evenly split amongst small (<500 FTE staff), medium (501-1500 FTE staff) and large (>1500 FTE staff). Participants in the interviewee process did not provide the same data.

Of those responding to the survey, 63% responded as individuals with 37% responding on behalf of their HEP.

Of those responding through the interviews, representatives from 6 HEPs wished to remain anonymous in the final project report, with representatives from 34 HEPs named. All input from interviewees remained anonymous with no direct quotations included.

For both the survey and interviews, the majority of those engaging with the consultation were in leadership (e.g. Director, PVC, 'Head of') positions (55% of those surveyed, 50% of those interviewed), with a sizable minority engaged in front line delivery (35% of those surveyed, 47% of those interviewed) and the remainder of survey respondents and/or interviews providing professional services or centre management. For the smaller institutions, these two groups did overlap, with senior leadership also providing front line delivery.

Regarding the focus groups, the team engaged with HEPs from:

- Wales – 4 HEPs
- Northern Ireland – 1 HEP
- Scotland – 9/10 HEPs

The intention was to understand the difference between the devolved nations research and innovation commercialisation landscapes, intending to gain an understanding of current support for SHAPE commercialisation and to understand how any unique context within the nations impacted the viability of different shared SHAPE TTO models.

Findings from the focus groups are included in this triangulation of the stakeholder consultations, particularly with regard to the questions on SHAPE commercialisation (1.3.2) and on thoughts on sharing approaches (1.5).

6.2.3 Approaches to supporting commercialisation

Research Theme: Your approach to commercialisation.

This is a baseline question to understand how people support commercialisation across all disciplines, so we can compare to how they support SHAPE.

Survey Questions

- **Q6** Team structure. How does your institution primarily support the following commercialisation and related activities? (Across all disciplines.)
- **Q7** Staff. Roughly how many FTE across your institution primarily (>50% time) support commercialisation activities? (Across all disciplines. Please provide your best guess.)
- **Q9** Budget. Do you have any dedicated budget to support the following activities?
- **Q10** How you define commercialisation. For your answers above about budget and staff, have you included consultancy and/or business engagement activities in these numbers?

Interview Questions

Not specifically asked.

Focus Group Questions

None.

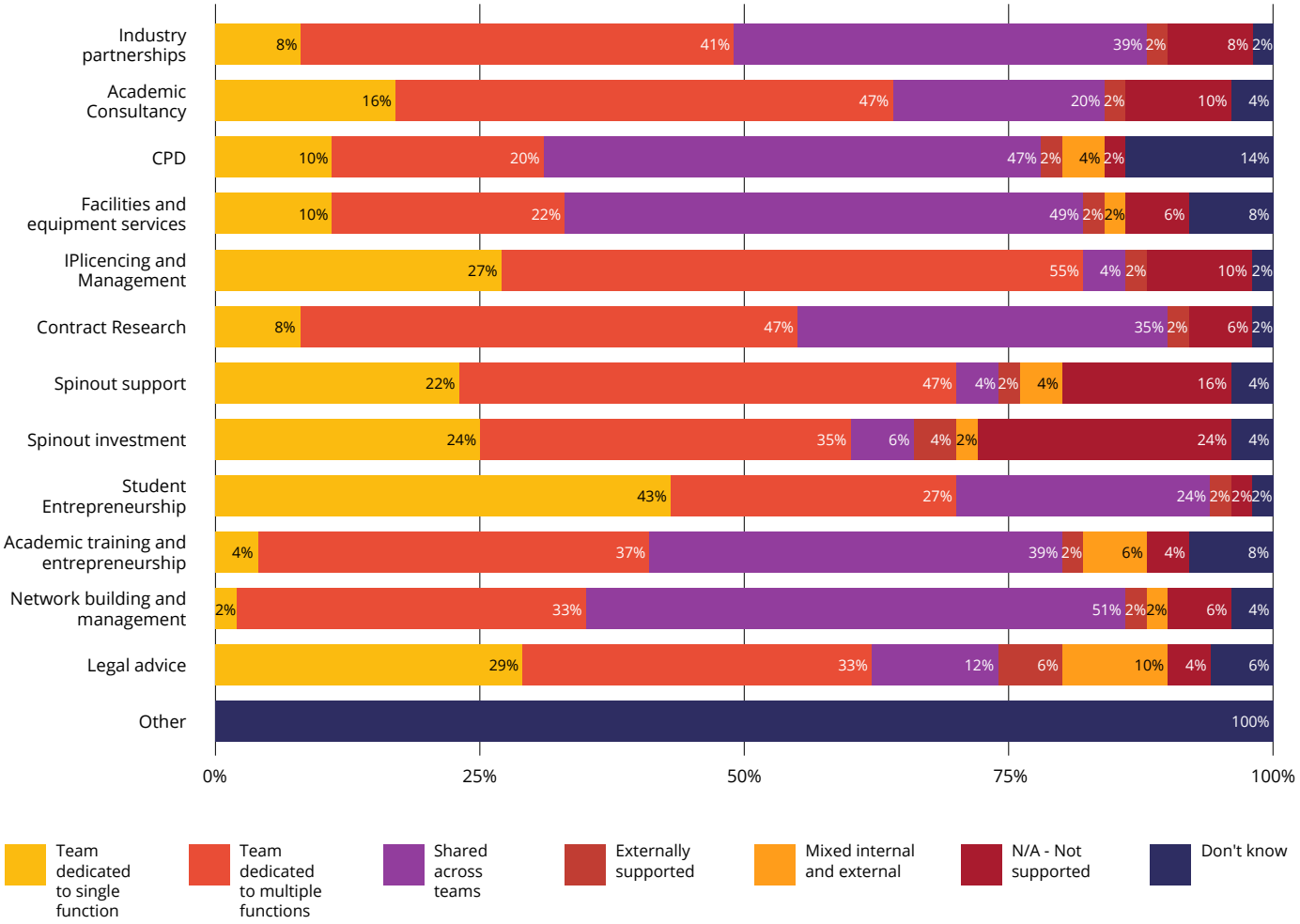
6.2.3.1 Commercialisation support

All HEPs surveyed provide some level of support for commercialisation, with Cluster V HEPs having the largest teams supporting commercialisation whilst specialist Arts HEPs had the smallest teams but were also more heavily represented within the smaller institutions.

Headline findings (Q6). Typically, support was provided through a combination of single specialist teams, teams dedicated to multiple functions, or support shared across teams, with student entrepreneurship more likely than any other function to be provided by a team dedicated to a specialist function. External support was utilised across commercialisation functions, but typically at very low levels compared with in house support. Spin-out support and spinout investment were not supported at 16% and 24% respectively.

The chart below provides a summary across the survey respondents of how the HEPs support the major commercialisation activities.

Figure 3: Analysis of survey data (Q6 - commercialisation support)



Looking at KEF cluster splits across commercialisation functions (separate bar charts can be found in the Survey Analysis section of this report):

- **Industry partnerships:** Only cluster V HEPs (27%) used dedicated teams for this activity, with the majority of support across the clusters coming from teams with multiple functions or shared activity across teams. One of the 3 STEM specialists surveyed outsourced this activity.
- **Academic Consultancy:** A low (17-30%) of KEF clusters Arts, E, V and X used dedicated team for this activity, otherwise this activity is shared across teams or supported by a team dedicated to multiple functions.
- **CPD:** Typically shared across teams of delivered by a team with multiple functions, although the Arts, E, J and V clusters also include a low proportion of HEPs with a dedicated support team.
- **Facilities & equipment services:** This function shows a very similar pattern to that for academic consultancy, with a low proportion of cluster E, J, V and X providing some dedicated team support.
- **IPlicencing & management:** Cluster ARTs, V, STEM and X all have a majority of HEPs supported by a team dedicated to multiple functions, with Cluster V and X having 45 and 40% respectively supported by a single dedicated team (suggesting a more mature service offering) and 67 and 50% of cluster J and M respectively not supporting this function at all.

- **Contract research:** Contract research and academic consultancy shared the same characteristics in terms of support across commercialisation.
- **Spinout support & Spinout investment:** These are grouped as they had very similar levels and types of support function, with 67, 75 and 33%, respectively, of clusters J, M, and ARTs specialists not providing any support or investment to spinouts. Clusters V and X received very similar levels of support from either single dedicated teams or teams dedicated to multiple functions, whilst STEM specialists also included a survey respondent who outsourced such support. Spinout investment was less supported, specifically for clusters J, M, ARTs specialists and E, for whom 67, 75, 50 and 25% received no support.
- **Student entrepreneurships:** With the exception of clusters M and STEM specialists, all clusters had specialist teams dedicated to this activity (ARTs 33%, E 42%, J 67%, V 64% and X 50%). The remaining support functions were either from teams with multiple functions or shared across teams. Only one HEP (an ARTs specialist) did not provide any support for this activity.
- **Academic training & entrepreneurship:** This function was largely provided by teams dedicated to multiple functions or shared across teams, with one ARTs specialist not supporting this activity.
- **Network building &management:** As above, this function was largely provided by teams dedicated to multiple functions or shared across teams with one cluster X HEP not providing support.
- **Legal advice:** Multiple KEF cluster HEPs provided support via a single dedicated team (ARTs 17%, E 20%, J 33%, STEM 67%, V 27% and X 40%). Otherwise, the majority of the remaining support function came through dedicated teams with multiple functions and activity shared across teams (cluster M 75%, cluster J 33%).

Analysis of FTEs (Q7) supporting commercialisation provided responses as you would expect, with smaller HEPs typically supported by fewer staff (e.g. 66% of smaller HEPs had either no dedicated staff or 1-5 FTEs) whereas the middle and larger HEPs had greater levels of support between 5-15 FTEs (44% of mid-sized HEPs and 45% of larger HEPs), with 15 to >20 FTEs supporting commercialisation in mid and larger sized HEPs at 19% and 28%, respectively. We note that 27% of small sized HEPs had commercialisation support teams of 5-20 (20%) or greater than 20 FTEs.

Dedicated Budget (Q9). HEPs provided dedicated budgets for SHAPE, STEM or both groups at: academic training (69%), staff training (67%), commercialisation staff (67%), Proof of Concept funds (63%), legal advice (65%), seed funding (57%), IPRs (53%), market research (51%). Conversely, activities that had no budget provision were as follows: IPRs (37%), seed funding (35%), market research (33%), Proof of Concept (31%), commercialisation staff (22%), staff training (20%), legal advice (16%), academic training (14%). The remainder of respondents did not know whether budget was dedicated to specific activities.

Definition (Q10). The majority of those surveyed included consultancy and business engagement activities as part of commercialisation (61%), with 24% not doing so and 4% answering 'mixed'. Of those surveyed 10% did not know what the definition included at their HEP. From the interviews, members of KEF cluster V tended to larger teams supporting commercialisation and to view commercialisation as 'licencing and ventures', whilst the majority of others interviewed (irrespective of KEF cluster) defined commercialisation through the wider 'HE-BCI' lens.

6.2.3.2 SHAPE commercialisation support

Research Theme: Your Approach to SHAPE commercialisation.

Are there any trends in how people support SHAPE? Does this vary based on other common characteristics about their organisation (i.e., size of research income, academic staff numbers, KEF cluster, geography, etc.?) Does this correlate to any other of responses later?

Survey Questions

- **Q8** SHAPE Staff. Do you have any staff primarily (>50% of time) dedicated to SHAPE commercialisation?
- **Q11**. Which of the following most closely describes the maturity of SHAPE research commercialisation at your organisation?
- **Q12**. What is your institution's position (formal or otherwise) on the prioritisation of SHAPE vs STEM?
- **Q18.** Optional: In what way is the type of support you provide for SHAPE commercialisation different from your usual commercialisation support? Can you provide an example? (Or, if you don't think it is different, please say so.)
- **Q19.** Optional: For areas of specialist/ different support for SHAPE, what types of external resources or tools do you use? (i.e., ImpactU, databases, etc.)

Interview Questions

- **Q2** Your organisation's approach to SHAPE commercialisation – Briefly can you tell me more about how your organisation currently supports (or not) SHAPE commercialisation?
- **Q4.** Optional (if time allows): SHAPE differences - How similar or different is the support you provide for SHAPE commercialisation compared to STEM? If it is different, can you provide an example?

Focus Group Questions

- How do you currently support SHAPE commercialisation: We would like to understand the (1) maturity, (2) size and (3) nature of SHAPE commercialisation in your ecosystem.

Research Theme: Size of your SHAPE commercialisation portfolio.

What is the benchmark in terms of size of SHAPE commercialisation? Does it vary based on some characteristic of their organisation (i.e., size, research income, staff FTE, KEF cluster), Are there any trends in terms of how the size of the portfolio relates to how they answer other questions in the survey or interviews?

Survey Questions

- **Q13.** Roughly what % of your organisation's research/ academic activity is from SHAPE disciplines? (Your best estimate or enter 0).
- **Q14.** Roughly what % of your institutions active commercialisation portfolio is from SHAPE disciplines? (Your best estimate or enter 0).
- **Q15.** Roughly what is the number of SHAPE projects in your institution's commercialisation portfolio? (Your best estimate)
- **Q16.** In your opinion, are you satisfied with the number or % of SHAPE commercialisation projects in your portfolio?

Interview Questions

- Answers to size of portfolio were provided by some interviewees through interview questions 2 & 4.

Focus Group Questions

- Not asked.

Dedicated SHAPE commercialisation support (Q8). Of the HEPs completing the survey 31% had dedicated FTEs providing SHAPE support whilst the majority did not have a SHAPE dedicated service (59%) and 10% were unsure.

Findings from the **focus groups** highlighted that only Aspect members had any dedicated or expert team focused on SHAPE commercialisation, with the comment that this resulted from prioritisation of STEM commercialisation as a more income-driven activity providing financial impact.

This feedback contrasted with that from the **interviews,** which showed KEF clusters ARTs specialists (100%), J (~75%), M (~70%) and V (100%) having substantial dedicated SHAPE support. Clusters E (~20%), X (~20%) and STEM specialists (0%) have less or no SHAPE dedicated support.

Maturity of SHAPE commercialisation support (Q11-survey, Q2- interviews, focus group responses). From the survey, the maturity of SHAPE commercialisation support was classed as:

- Nascent –early stage (30% HEPs)
- Seeding – mid stage (43%)
- Towards a critical mass (14%) /building a scalable, repeatable process (11%) - mature stage.
- *(2% respondents answered that they did not know)*

Representatives of the ARTs and STEM specialists, clusters E, V. and X included more mature offerings, whilst all J and M HEPs were classified as either early or mid-stage. Finally, analysing against Aspect membership showed that Aspect universities were more likely to be 'building a scalable, repeatable offering' whilst non-Aspect members were more likely to be at the nascent stage.

Outputs from the **focus groups** highlighted a prioritisation of SHAPE with the more mature offering from Aspect members; in particular, a standardised approach to SHAPE opportunities triaging was lacking and the SHAPE portfolios as they stood were very early stage/immature.

Of the **HEPs interviewed,** the majority were classed as early stage (100% of the cluster Ms,~70% of ARTs specialists, E and J cluster, 50% of STEM specialists, 30% cluster X, and ~25% of the V cluster), with a substantial proportion of clusters X (70%), STEM (50%), E, and J (~25%), V (~25%), ARTs (~10%), classed as mid-stage. Approximately 15% of the ARTs specialists and 50% of the cluster V were classed as mature (these 'mature stage' HEPs also had dedicated SHAPE support, as did 50% of the early-stage HEPs and 6~60% of those classed as mid-stage).

From the interview outputs the following also became clear:

- The 'middle and later phases': protecting, engaging (Value Proposition etc., understanding routes to market), nurturing via translational funding), deal making, are resource limited across the HEPs.
- SHAPE is not 'one size fits all'. Specialist Arts HEPs, whilst having sometimes small teams, are, typically, impactful, and engaged – notably with the creative economy – including digital.
  - Examples include RCA, NFTS, Bath Spa
- More typically in Arts rather than Social Sciences and Humanities, practitioner academics are very active outside as well as inside their institutions, adding a layer of complexity to contractual, personal as well as institutional motivation/ability to engage.
  - This is more of a factor for cluster E, J, M, Arts and STEM specialists compared to Cluster V, X HEPs.

Prioritisation of SHAPE (Q12). The majority of HEPs surveyed either took no formal position (25%) or were of the view that STEM and SHAPE were of equal priority (27%). Of the remainder, 23% stated that STEM was a higher priority, 16% reported that SHAPE was a higher priority, and 9% did not know.). By cluster, ARTs specialists, and M cluster either prioritised SHAPE, took no position or prioritised SHAPE and STEM equally, whilst V and X were more evenly distributed between no position, equal prioritisation and STEM prioritisation. Finally, HEPs with dedicated SHAPE support were more likely to prioritise either STEM or SHAPE highlighting that they had a clearer stance than those with no dedicated SHAPE offering. Answers from the **Focus Groups** highlighted a greater prioritisation of STEM commercialisation (as an income driven approach), whilst feedback from interviewees highlighted greater prioritisation of SHAPE in the more mature and mid-stage HEP.

When asked about **the types of support provided for SHAPE commercialisation (Q18 survey and Q4 interviews),** the feedback provided was consistent irrespective of consultation method, including the following points, noting that the support for STEM and SHAPE commercialisation was similar but with nuanced differences:

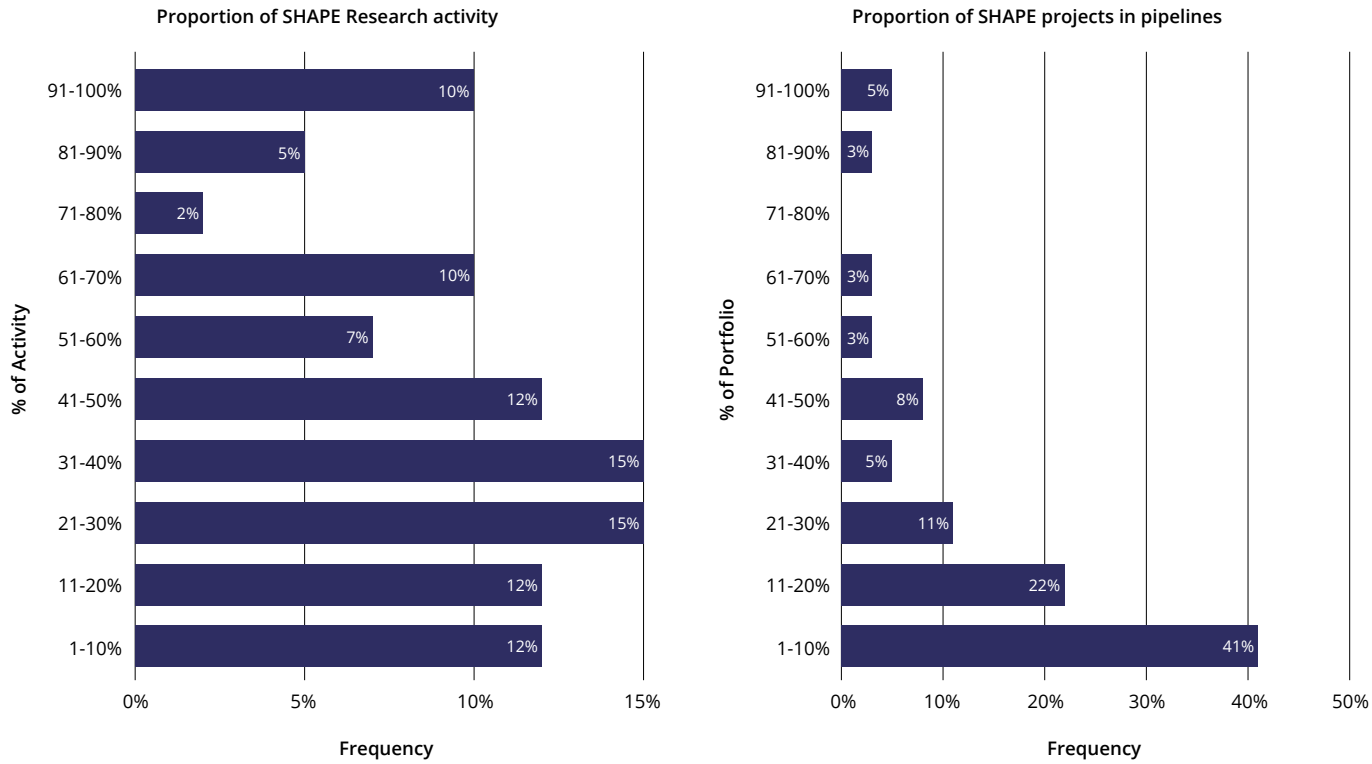
- The importance of language used when conversing with SHAPE academics (SHAPE academics can feel that commercialisation is not relevant to their work resulting in fewer case studies).
- Intellectual property for SHAPE commercialisation tends not to require patents, being more likely to focus on know-how, copyright and Trademarks.
- Less obvious licensees – the view being that this was, in part, due to a lack of obvious / understood routes to the market – public and 3rd sector/ voluntary/NGOs.
- Greater likelihood of support for consultancies/ spinout vehicles and for 'not for profit' spinout vehicles.
- A shallower but no less pervasive valley of death, requiring lower amounts of Proof of Concept or seed funding, but:
  - More difficulty in making financial/revenue business cases to justify the investment, particularly with impact likely to come in the not-for-profit/voluntary sector or the public sector.

Even amongst the ARTs specialists and cluster E, J, M HEPs, most HEPs still committed substantially less funding/ resource to SHAPE projects than to those from STEM. The ARTs and STEM specialist HEPs also both highlighted the importance of mission driven accelerators and enterprise support for SHAPE/STEM interdisciplinary projects.

Survey outputs (Q19), interviews and focus groups highlighted the use of free and paid for specialist support for SHAPE commercialisation, including: ImpactU, ARC, LinkedIn and (paid) Aspect and Knowledge Exchange UK. Those that had used Aspect were more likely to be at the maturity stage of 'building a scalable, repeatable process'.

Regarding the proportion of SHAPE research at the HEP (Q13) and active commercialisation pipelines from SHAPE disciplines (survey Q14, Interviews Q2 and Q4), research/academic activity from SHAPE disciplines was estimated to comprise an average of 44% (noting that 27% of those interviewed classed >50% of their research/ academics as SHAPE focused, whilst 66% identified their SHAPE research/academics as <50%. Conversely,

Figure 4: Survey results showing proportion of SHAPE research vs SHAPE commercialisation



on average the survey analysis highlighted 37% of the commercialisation pipelines comprising SHAPE projects, for 63% if respondents noted that SHAPE only took up 1-20% of their pipelines, and only 8% noted that SHAPE projects took up 81-100% of their pipelines. Even ARTs and cluster E, J and M HEPs commented that substantially lower levels of support went on SHAPE than STEM projects.

Not surprisingly, the **numbers of SHAPE projects in pipelines (survey Q15)** increased with the increasing maturity level of the HEP, with a median of 30 projects in the pipelines for the more most mature level and 31.5 in the next level down (towards a critical mass), whilst HEPs in the seeding (median of 7) and nascent stages (median of 1) were far less active. A small proportion of the most mature HEPs had 61-100 projects in the pipelines. Whilst not focused on actual numbers of projects in the pipeline, interviews did highlight a number of HEPs where awareness raising activity had promoted interest in SHAPE commercialisation from academics, increasing the pipelines, but where a lack resources was then limiting the number of projects that could then be supported. The majority of HEPs surveyed (52%) were not **satisfied with their number of SHAPE projects (survey Q16)**, with only 20% satisfied or very satisfied. From the interviews, ARTs specialists active in commercialisation were satisfied with the level of activity in their pipelines, whilst SH HEPs were less likely to state that they were satisfied.

Conclusions and Considerations

Commercialisation is supported across the KEF clusters, with answers from survey, interviews and focus groups highlighting the use of the broader definition of commercialisation (viewed through the HE-BCI data lens) used by all except the Cluster V HEPs (who tended to the licencing and ventures definition).

SHAPE support was likely to be prioritised more by SHAPE specialists or Cluster M HEPs (this answer came out more strongly through the interview process).

While all feedback from those surveyed, interviewed and in focus groups highlighted a similar approach to SHAPE commercialisation as to that for STEM, the interview and survey data allowed greater nuance in the differentiation between SHAPE and STEM projects, highlighting the potential for opportunity around a shared SHAPE support:

- Nuances over language used in the early awareness raising / mindset change process, where the knowledge of the specific HEP and discipline were important for success.
- Less understanding of the markets for social sciences and humanities outputs, which may prompt a greater likelihood of support for consultancies and spinouts;
- More successful commercialisation from some ARTs specialists who are very close to/engaged with the creative economy – much of which combines the arts with digital technology;
- A shallower but no less pervasive 'valley of death' also impacting on progress of projects through the commercialisation pipeline.
- Resource limitation across the HEPs during the middle and later phases of commercialisation (Value Propositions., business cases, understanding routes to market), nurturing via translational funding, and deal making).

Survey, interview and, to a lesser extent, focus group outputs highlighted fewer resources going to SHAPE projects within HEPs, and the use of free and paid for support from external sources where available (e.g. Aspect, ImpactU, ARC, IAA funds from UKRI). The focus groups also noted that the devolved nations received less external funding than HEPs funded through HEIF.

The survey asked more questions on commercialisation support than the interviews or focus groups. Interviews provided an opportunity to discuss in more detail, for example, why a) SHAPE was or was not prioritised by different HEPs, and b) what the nuances were in terms of support for SHAPE commercialisation compared to that for STEM, highlighting an immaturity in the process for those HEPS that were not engaged in Aspect (taken from focus group and survey data). In large part survey, interview and focus groups outputs supported each other but tended not to overlap.

6.2.4 Gaps and opportunities

Research Theme: Gaps and opportunities

What could/couldn't be shared amongst universities? What should/ shouldn't be shared? Are there things that are best shared via a shared TTO function, or via another mechanism or programme?

Survey Questions

- **Q17.** In the following list, please select areas where you feel you would most benefit from additional expertise or support for SHAPE commercialisation at your institution (up to 3).
- **Q20.** Sharing processes and tools. For each of the following areas, how beneficial would it be for your institution to access shared support for SHAPE commercialisation?
- **Q25.** Where do you feel you could most benefit from sharing SHAPE commercialisation support or pooling resources?

Interview Questions

- **Q5.** Opportunities for sharing: Are there any areas where you feel you could most benefit from sharing or pooling resources for supporting SHAPE commercialisation?
- **Why?** Follow-up question if time allows: Any areas would least benefit from sharing/ be difficult to share, and why?

Focus Group Questions

- Gaps and opportunities: We would like to understand the areas your institution/ecosystem might benefit the most from additional expertise or support.

All three approaches in the consultation asked questions on what areas would most benefit from additional expertise or support for SHAPE commercialisation **(survey Q17, focus group question)**, how beneficial it would be to HEPs to access shared support in terms of tools/processes **(survey Q20)**, and where the HEP felt they could most benefit from sharing or pooling SHAPE commercialisation resources **(survey, Q25, interviews Q5)**.

There were nuances in the answers from the different consultation approaches (NB: the survey provided closed questions with choice of expertise/support whilst interviews and focus groups asked open questions of the HEPs, which, as semi-structured interviews, did not always focus on the same subjects). There was crossover between answers, with combined survey, interview (HEP %) and focus group feedback provided in the table below (some areas have been combined from the survey options and interview comments).

Table 5: Comparison of survey interview and focus group responses, regarding the areas perceived as gaps

Areas that would benefit from additional support/perceived gaps/opportunities	Q17 Survey response %**	Interview response %	Focus group mention
Funding availability (across the pipeline, PoC to investment funds)	18% for investment funds	**75%**	YES – top choice
Academic staff training/awareness raising	**55%**	40%	YES
Peer-to-peer networks	Not included	**68%**	NO
Sharing good practice and policies	**36%**	**73%**	YES
Good practice case studies	Not included	**68%**	YES
Access to pre-accelerator programmes	25%	**55%**	YES
Building investor networks	23%	**58%**	YES
Contract negotiations/legal & professional resources	7%	**58%**	NO
Appropriate metrics for SHAPE outputs	Not included	40%	NO
Market research /commodifiable activities/IP due diligence	18% incl. triaging	53%	NO
Business support/specialist advice/access to expertise	11%	**65%**	YES
Funding applications support	11%	Not mentioned	NO
Academic consultancy support	7%	Not mentioned	NO
Venture creation	7%	Not mentioned	NO
Sourcing/creating founding teams	**30%**	Not mentioned	YES
Triaging (see market research also)	16%	Mentioned*	NO
Professional services training	14%	Not mentioned	NO
licencing	0%		NO

*Mentioned as part of commodifiable activities in interviews; ** Participants were also asked to rate how attractive sharing would be for SHAPE – this data is not included in this table but is discussed in the next section.

With regard to gaps/opportunities and where HEPs may most benefit from shared resources, **analysis of the survey responses** highlighted a high level of similarity between responses from the different KEF clusters, focusing on the broadest possible range of commercialisation support (see table above). Some points that stood out included: bigger HEPs prioritising market research, IP due diligence and academic staff training/awareness raising and sourcing founding teams; smaller HEPs distributing preferences more evenly with academic training/awareness raising as the top choice.

Aspect members also prioritised sourcing and creating founding teams, building investor networks and academic staff training/awareness raising, whilst non-Aspect members priorities were again more evenly spread with academic training/awareness raising as the top choice. Finally, the more mature HEPs priorities building investor networks as their key need, whilst those HEPs one stage less mature (towards a critical mass) had sourcing teams and raising investment as their top choices. The least mature in terms of SHAPE commercialisation prioritised academic staff training/awareness raising and sharing good practice.

Reviewing feedback from **the interviewees** funding, specifically for Proof-of-Concept to Proof-of-Market, ring fenced for SHAPE, and accelerator support funding/ programmes (i.e., similar UKRI SHAPE Catalyst) were the first gap/opportunity mentioned by the majority of interviewees. HEPs that were less mature, were not members of Aspect, and/or were less well-resourced also focused on shared good practice, policies, legal and IP related documents etc. Investment funds (including philanthropic funding), investor and business networks were highlighted by the more mature HEPs. Business advisors/consultants with expertise in reaching the markets for SHAPE research outputs, was a high priority choice for many of the smaller – mid maturity HEPs with limited resources to employ full time staff.

Interviewees did not perceive there being an opportunity for a wholly outsourced commercialisation service, noting that the early stages of commercialisation support, working most closely to effect mindset change, would only work if done by HEPs own staff. Specific reasons provided for this view were: lack of trust between external providers and academic / professional staff and lack of knowledge of the local ecosystem. However, from IP review onwards external or shared support provision was popular.

In common with the survey results, there was a lot of similarly across the KEF clusters in terms of gaps/ opportunities, with some sense that ARTs, J and M coalesced around good practice guidelines, checklists etc and administrative support whilst cluster V and X had less need for legal and professional support. Maturity levels were much more important (as with survey respondents) with the more mature HEPs highlighting investment and business connections, appropriate metrics, national leadership and specialist advice, whilst mid-stage HEPs highlighted funding, UKIR SHAPE Catalyst and other accelerators, commodifiable support, IP resources, case studies, leadership, general awareness raising and relationship development. Finally, the early stage HEPs focused on peer networks, specialist advice, legal and professional support, and (slightly less than the mid-stage HEPs) funding.

The **general considerations raised by the focus groups** highlighted a low level of ecosystem maturity, a mismatch between government priorities and funding provision, no clear pattern among mature or less mature HEPs and, notably, that the smaller size of the sector in the devolved nations and collegiate atmosphere makes it easier to collaborate. As highlighted in the table focus group members shared many of the same views regarding which areas of commercialisation would most benefit from shared support.

Q20 in the survey asked how **beneficial it would be for HEPs to access shared tools and processes**, the answers to which were subtly different from those in Q17 and largely were more aligned with interviewee feedback. All tools and processes included in the survey choices received at least 50% support as highly or somewhat beneficial (training (95%), practices/knowledge/ information (95%), opportunities for people development via secondments/ shadowing/mentoring (92%), networks - investors, spin out management (91%), templates (91%), platforms e.g. for showcasing innovations (78%), outsourced 3rd party support (66%), and centrally negotiated pricing (65%). The greatest differentiator for support for different tools was the maturity of the HEP, with those HEPs at critical mass or a scalable process indicating less interest in centrally negotiated pricing, platforms, templates, training, access to 3rd party support (which HEPs with a scalable process largely viewed as not beneficial in contrast to all other maturity levels).

Similarly, the interviews enabled some discussion around what would be **most beneficial to share**, including the following:

- Training materials for TTO staff as well as academics – including easy to access case studies.
- Communities of practice for TTO staff and separately for academic peers.
- A shadowing/mentoring/secondment process, which would also enable capacity building within the HEPs.
- Knowledge based support – a cohort of experts with policy and market knowledge who could provide support specifically in developing routes to market for projects:
  - Multiple HEPs (across Clusters) commented that they had too many projects following awareness raising and were unable to support them, which could lower trust and interest from academics.
- Triaging of opportunities that could also identify potential for collaboration.
- Finally, where economies of scale were highlighted, PoC, URKI SHAPE Catalyst type accelerators, incubators, incubator support, management networks experienced in working in the public sector, voluntary sector, policy making and, for the creative arts, the wider creative economy.

The interviews also enabled discussion of what areas of SHAPE commercialisation would **least benefit** from sharing or be difficult to share **(Q5 follow on)**. Activities where shared services would be less beneficial included: early academic mindset change, particularly because such activities were viewed as requiring a "slow build" to change the culture. The view was that this activity should be delivered internally, even if good practice guidelines and case studies were sourced from a shared service. Similarly, early-stage project development/support and assessment of commercial potential were viewed by some interviewees as being difficult to share. When thinking about local ecosystems and geographical nuance – locally, regionally, nationally and internationally – where engagement with local policy makers and end – users is important, the view of civic HEPs and organisations with notable place-based impact was that these networks would be difficult to share or to access from a national shared service.

Conclusions and Considerations

The survey respondents were provided with a series of answers selected by the project team, whilst the open semi-structured questioning of the interviews (and to an extent focus groups) enabled in-depth answers providing additional information on the rationale behind interviewees suggestions for where there are gaps in the SHAPE commercialisation provision and where the opportunities might be for shared services. There was some overlap between the two approaches (see table above), strengthening the evidence. The focus groups highlighted a number of key points in line with findings from the survey and interviews and made the valuable point that the smaller number of HEPs and more collegiate ecosystem would likely be beneficial to the success of a shared service offering.

Funding (across the pipeline from PoC to accelerator funding), academic staff training, academic peer-to-peer networks, good practice, case studies, pre-accelerator programme access, investor and business networks and commodifiable activity support (e.g. market reviews, due diligence, triaging) and expert specialist business support **were highlighted as being able to be shared across the consultation process.** Sharing of IPR related support and templates, legal and professional services were also highlighted as being shareable among HEPs.

A number of these gaps/opportunities for **sharing already exist, and are made use of** by many HEPs surveyed, interviewed or consulted with in focus groups. These include free resources such as: Impact U and UKRI SHAPE Catalyst (albeit that these are funded by UKRI), paid resources such as Aspect and KEUK and services such as LinkedIn. A shared service model could include informed signposting to other offerings such as these or could involve expansion of some of these offerings given that they are viewed as providing economies of scale.

In the view of interviewees, activities or materials that would be **less beneficial to share** included: early stage awareness raising and mindset change for academics; early stages of project development; geographical nuance particularly around place-based impact in the public and voluntary sectors, the comment being made a number of times that civic universities and research intensive national/international universities (typically Cluster V) would not benefit from sharing networks and engagement activities.

The **clearest disagreements** between survey outputs verses those from the interviews and focus group were: the need for shared funding (SHAPE ringfenced PoC in particular), highlighted by interviewees and focus groups; academic peer-to-peer networks, which were a high priority from the interviewees and sourcing/creating funding teams (the 3rd most popular answer in the survey but not obviously paralleled in the interviews). Aligned with this, however, was the feedback from interviewees who highlighted the benefit that management networks experienced in the public sector, voluntary sector, wider creative economy and in different business models would bring, ideally including an understanding of policy clients and public sector delivery.

6.2.5 Sharing approaches

Research Theme: Thoughts on different sharing models.

What ways might sharing work? For examples, how might it be funded, governed, grouped, operated, etc? What would universities be willing to share/input themselves (vs what support needs to be brought in from elsewhere)?

Survey Questions

- **Q21.** Shared or outsourced delivery models. For each of the following models, please indicate how attractive they would be to your institution (for SHAPE commercialisation).
- **Q23.** Past sharing experience. Are you currently, or have you in the past, taken part in any formal commercialisation sharing activities with another HEP? (For example: sharing money, people, or delivery of support, rather than informally sharing knowledge.) If yes, please can you tell us more about what was shared and how it worked? (Or may we discuss this with you in a follow-up interview?)
- **Q24.** Future ability to share. Do you consider that your HEP has, in theory, expertise and/or capability that would be useful for other TTOs to access?

Interview Questions

- **Q6.** Future ability to share. Do you consider that your HEP has, in theory, expertise and/or capability that would be useful for other TTOs to access? Could you tell us more about your answer above. (i.e., what expertise or capability would you be willing to share? If no, why not?)
- **Q7.** Sharing models. If some sort of sharing arrangement *was* to be put in place, in your view, how would it best be organised?
- **Q8.** Past sharing experience - Are you currently, or have you in the past, taken part in any formal commercialisation sharing activities with another HEP? (For example, for "formal" we mean: sharing money, people, or delivery of support, rather than informally sharing knowledge - does not have to be SHAPE-specific.) If yes, can you tell us more about that? If no, are you familiar with other examples and how those worked/went?

Focus Group Questions

- Sharing models and devolved nations specificities

The survey provided options for participants to rate as highly attractive, somewhat attractive, somewhat unattractive, very unattractive, and don't know **(Q21)**. All the options, excepting a fully outsourced model to another HEP, which would charge a fee for services (33% attractive), were viewed by >50% as either highly or somewhat attractive.

- Expanding existing collaborations, promoting SHAPE representation to maximise capacity including raising funds (82.5% attractive)
- Procurement framework – groups of HEPs using a pool of providers for economies of scale (70%)
- Jointly owned TTO – small HEP consortia setting up jointly owned TTOs (57.5%)
- Outsourced to suppliers – Groups of HEPs commissioning outsourced support from non-HEP organisations with skills and experience in SHAPE spinout support (57.5%)

Interviews around this question **(Q7)** of how a sharing model might best be organised, shared the negative view of a fully outsourced model view that but were also 100% of the view against not sharing any aspects of SHAPE commercialisation. Key feedback from interviewees on the support and tools to be shared included:

- A large appetite for a comprehensive, flexible offer delivering policy, process, good practice guidance for the SHAPE 'markets', expert advice and connections when developing projects into value propositions and routes to markets, market testing and UKRI SHAPE Catalyst programme type support when "kicking the tyres" and deal making.
- Some interviewees were of the view that the shared office should be provided by HEPs, rather than working with 3rd parties/external expertise. Others took the view that the expertise offered would benefit from being independent, experienced in working with and in the markets, and more accepted across the HEPs.

- Shared offering across the sector (open to all HEPs) could provide shared capacity building, economies of scale on forms, processes, policies, IP protection specific to likely SHAPE offerings – less patent more other IPRs). And market testing accelerators such as ARC, with a focus on business models that work in the social impact economy.
- Case studies (very popular) with interviewees (often highlighting how they are aware that the discussion on case studies has been going on for years).
  - Commentary was that there are a lot of case studies available, but they don't reflect the diversity of SHAPE disciplines, they are not in easily 'digestible' formats for the academics to engage with, and that they could be much better signposted and easier to access across the HEPs.

Interviewees also provided input on whether a geography or specialism were the preferred model for sharing, with the most positive feedback received for a flexible model, combining both. Only a 'national' one-stop-shop was unpopular as a choice (correlating somewhat with the survey response that rejected a fully outsourced model provided by another HEP).

Interviewees were also asked about funding models for any shared SHAPE offering, with a partly or fully funded model not surprisingly the most popular – mentioned by >50% of HEPs. Subscription, and tiered funding (with some free provision but a fee structure for particular activities) were also mentioned, with funding based on HEP size, a pooled grant, and a cluster-based grant format to ensure 'skin in the game' also receiving single mentions. There was a strong view that initially at least a shared SHAPE provision would require external funding to become established and succeed.

Interviewee responses on geographical/specialism shared TTO model (a question that was not asked in the survey) highlighted the following table.

Table 6: Summary of interviewee response about geographical and specialism sharing models

Geographical model	Specialism model
• Better sharing of support services for earlier stages when forming relationships. • Place based collaborations beneficial for place based HEPs (civic universities etc.) where peer-to-peer learning may benefit from not being siloed into specialisms. • A model based around economic opportunities (place based), where SHAPE impact is often local. • Collaborations between complementary HEPs (of different clusters) with similar research base/concerns) – an established sharing model • Geography has advantages for forming relationships and developing shared working practices. • International impact HEPs tended to the view that geography would not fit their needs.	• Geography is important but so is the recognition that SHAPE includes a huge diversity of disciplines engaging with different markets, so specialism segmentation is also important. • Specialism of HEP 'type' – HEP remits, KEF clusters, similar markets (e.g. creative arts, public sector), e.g. civic institutions – will require nuance and careful agreements HEPs share with each other. Know-how of specific markets (e.g. creative economy, public sector) would be necessary for shared support to succeed. • A shared service could pool capacity where additional capacity is needed to attract the market, building market penetration and networks to increase licencing opportunities in particular.

Combined delivery model
• An ideal model may be a mixed model federated hubs with specialist sector KE advisers providing support to resource 'stretched' HEPs under financial and economic pressure who don't have the funding to bring in consultants or resource to employ TTO staff for the projects encouraged to come forward. • Ideally aligned with regional and national economic issues and potentially with Mayoral Authority strategies • This model could be underpinned by a national common offering providing, e.g., training, good practice models/documents/ policies, and funding in support of PoC and accelerators (e.g. ARC). • Though regional, these hubs would have a large virtual component. • These collaborations should be opened to the industry and the 3rd sector

Focus groups with the devolved nations commented on the pros and cons of different delivery models: 'sharing equally' between HEPs, 'Hub and Spoke' model, a 'shared services hub' and a 'procurement framework'. While there were no strong preferences across the models, the following considerations were noted across the nations:

- Concerns about IP ownership.
- The importance of not losing the deep understanding of each HEP's context.
- Whether there is a critical mass?
- How sustainable a shared TTO model would be? Who would 'own' it? Even obvious 'hubs' don't have capacity.
- The importance of tailoring support to specific legal frameworks for each nation.
- Limited funding, hence limited institutional resources.
- General economic conditions are impacting/limiting access to funding.
- The important linguistic concerns in Wales.

The focus groups had no strong preferences for any of the models discussed. Consistent with the input from interviewees, they noted the following factors that should be considered when designing the shared model: geographic proximity, cultural awareness; funding levels. Also aligned with interviewees and survey results, there was a strong interest in extending accelerator type activities (e.g. ARC), and in having a shared 'resources' provision, in terms of good practice, policy, training. In common with the survey and the interviews, the extensive support needs highlighted by participants suggest the relative immaturity of SHAPE commercialisation. Finally, they did not comment on any clear pattern regarding specialisms, except that the Arts, maybe, needed specialist support.

Regarding previous experience of sharing, most interviewees and those surveyed have experience of sharing aspects of the commercialisation process with other HEPs **(Q6, Q7 in the interviews and Q23 from the survey)**. Much of this sharing experience was through UKRI funded programmes (e.g. CCF), with examples also provided where local public sector funding had been used to support knowledge exchange (e.g. Big South London).

Q24 of the survey showed 45% of respondents considered their HEPs to have the ability to share practice in future, with 20% of the view that whilst willing to share they were not yet able to; 33% were not sure and only 3% did not think their HEP had future ability to share. From the **interviews (Q6)**, whilst of the view that they could share practice, case studies, training, networks, the majority of those interviewees were concerned that they did not have availability/resource to share, with many practitioners fully engaged in building SHAPE commercialisation in their own HEPs.

Conclusions and Considerations

Survey respondents were provided with options of different shared or outsourced delivery models, which they rated according to how attractive they were (highly attractive, somewhat attractive, somewhat unattractive or very unattractive, don't know). The were also provided with options on whether their HEP had expertise or capability that could be usefully shared with other HEPs (yes, no, not yet, not sure). Interviewees, conversely, were asked open questions regarding how what could be included in a sharing models and how best, in theory, a shared SHAPE service could be organised/ delivered. Interviewees were also asked whether they had capability/ expertise to share, if they were willing to do so, and if not, why they were not willing to share. Focus groups were asked to comment on particular hub models and how they could work in the nations and/or across nations.

In answer to how sharing might work, survey respondents were generally very positive about a range of delivery models, with the expansion of existing collaborations and having a procurement framework for groups of HEPs using a pool of providers enabling economies of scale being the two most popular models. Jointly owned TTOs with small HEPs consortiums and an outsourced model making use of 3rd party suppliers were also viewed favourably overall. **Interviewees** did not contradict these choices but focused more on what the shared service could provide, e.g. a comprehensive but flexible model delivering support as needed by different HEPs, including: policy, process and good practice guidance, advice and connections when developing value propositions, and market testing and acceleration activities. Interviewees were split on just how much of such an offering should be delivered by other HEPs or by 3rd party organisations who could be independent

and experienced working in markets for SHAPE research outputs. Interviewees were very certain that any shared service had to support capacity building for the HEPs, and that more accessible case studies would be a valuable offering. Survey respondents and interviewees **both rejected the suggestion of a fully outsourced model.**

When asked about how sharing might be governed/ operated, interviewees commented on the preferred approach in terms of either SHAPE specialisms or geographic place. A mixed mode model was suggested, providing a national common offering – potentially building on existing shared services such as Aspect/ ARC/ImpactU, KEUK and including a national ringfenced PoC; and (a) local/regional delivery hub(s) aligned with local markets and economies. Through these hubs, HEPS could access external KE advisers with specialist and local market knowledge for SHAPE. **Funding was also discussed**, briefly, with a 'fully funded' model most popular, but subscription and tiered funding (with some free provision but a fee structure for some activities) was suggested.

Focus groups, in common with the survey and interviewees, had no strong preferences across the models shared with them ('sharing equally' between HEPs, 'Hub and Spoke' model, a 'shared services hub' and a 'procurement framework) but they did raise important considerations around: funding, IP ownership, geographic and cultural differences, economic conditions, sustainability, and the importance of tailoring support to different national legal frameworks. They noted a strong interest in extending accelerator support and having a shared provision of good practice resources (in line with survey and interview findings).

When questioned as to their own ability to share, the majority of HEPs expressed a willingness to do so in future but also noted that they were very under-resourced, certainly compared to STEM projects (section 1.3 above). Resources that they would be willing to share immediately or soon included case studies, training, good practice guidance and networks, noting that this was something that they already did through other formal sharing activities.

6.2.6 Barriers, enablers, and incentives

Research Theme: Barriers, Enablers and Incentives.

What would prevent or enable sharing? What are some important preconditions or dependencies to consider?

What can we learn from other past sharing experiences about barriers, enablers, and what works or not?

Survey Questions

- **Q22**. Barriers and enablers. What factors are most likely to influence your decision to engage or not engage in shared practices or an outsourcing model? (i.e., what do you foresee as potential concerns or incentives for your HEP?)

Interview Questions

- **Q9.** Barriers and constraints: What do you foresee as potential barriers or constraints with shared approaches to SHAPE commercialisation? What concerns do you have?
- **Q10. OPTIONAL (if time allows): Incentives:** What would incentivise your HEP or what incentives would your HEP need in order to participate in shared support approaches?

Focus Group Questions

- Sharing models and devolved nations specificities

Survey, interviews and the Focus Groups asked open questions of participants in the consultation, with the survey focusing on the factors most likely to influence any decision to engage in shared practices for SHAPE commercialisation (either potential concerns of incentives), whilst interviewees were asked about what they thought the barriers or constraints would be for shared approaches to SHAPE commercialisation. Where time allowed, interviewees were also asked about potential incentives to participate in shared support approaches. Focus groups provided comment regarding the likely pros and cons of the four shared support models outlined in **section 6.2.5**.

The major barriers and constraints as mentioned by interviewees are listed in the figure below.

Table 7: Analysis of barriers and constraints mentioned in the interviews

Research Theme	#HEPs	Percentage of HEPs Interviewed
Time	29	73
Resources	25	63
Lack of on-funding	23	58
Confidentiality	21	53
Trust	11	28
Bureaucracy	10	25
Lack of Capacity Building	8	20
Imbalance in effort v return	7	18
How useful would it be	6	15
Lack of representation	2	5
Matrics	1	3
HEP Size	1	3

The main barriers and constraints fed back from the interviewees were:

- Lack of national leadership (consistent and strategic) & lack of messaging
- Tight ownership, legal framework needed for senior leaders to engage
- Time
- If value isn't felt quickly
- Trust
- Around funding disparity between smaller and larger HEPs
- Transparent and equitable avoiding most funding going to larger research intensive HEPs
- Needs equivalence of partners/users (particularly between research intensive and teaching intensive HEPs (cultural issues between research focused academics and practitioner academics – many of whom work in Arts, Cluster E and Cluster M HEPs)
- Academic body stronger on social justice than finance – a lack of trust in professional services and commercialisation
- Between academic body, professional services, leadership (all under huge financial pressure)

These points were echoed in the feedback from the survey, summarised in the table below, where survey respondents were asked to provide commentary on what they viewed as possible enablers and constraints.

Table 8: Analysis of barriers and enablers from the survey data

Factors	Enablers	Barriers
Collaboration & partnerships	HEPs keen on collaborating as resources are limited and unlikely to be prioritised. HEPs not competing in TT creates an opportunity to collaborate. Staff/ academics keen on creating new connections and skills.	As a small HEP it will be easy to become swallowed up as a junior partner. Concern around loss of control. Outsourcing not attractive though collaboration with other HEPs (more STEM focused) is.
Intellectual property	Sharing good practice – will need clear plans in place.	HEPs must have their own IP commercialisation teams, if they are serious about this. Concerns around IP, competitors, and the ability to share across HEPs. Ownership is key to commercialisation, which may be lacking if practices are shared.
Internal decision making/control	Potential benefits to HEP and alignment with internal expectations. A clear sense that HEPs taking part get equal opportunities and are not disadvantaged based on pipeline.	Having the time to dedicate to this activity. Cost of outsourcing if purchase minimums or hierarchy exists. Price, capacity and value compared with other priorities.
Costs & funding	Require resources and funding to engage – can't do this on all fronts. Support could speed up progress, as could accessing complementary expertise. Additional internal resource would be welcome. Access to PoC would be an incentivise.	Real issue is the need for proper funding for TTO activities. Value for money could be an issue (noted across feedback). Access costs of a shared model. Competing interests for the funding and time needed to do this. SHAPE commercialisation is not a priority. Time and costs.
Institutional policies / culture	Early engagement requires institutional knowledge/trust. Establishment of consortiums/frameworks enabling shared resources and practice. Attractive to share activities with STEM HEPs, to increase/ enhance interdisciplinary activities.	Cultural and policy differences can be a barrier to collaboration. Lack of compatibility between cultures, processes and policies. Model needs to be sufficiently simple to easily explain to HEP stakeholders to encourage buy in.
Staffing capacity	Upskilling of staff, capacity building. A national framework of advisers with market knowledge to support the internal development and capacity building in HEPs not currently commercialising SHAPE outputs. Opportunity to build internal capacity.	Commercialisation staff work long hours with very little budget, unable to meet demand. Junior staff under pressure from other 'faster payoff' activity. Not unique to SHAPE. Many respondents commented on lack of capacity, funding, resources.
Uncategorised feedback	Outsourcing to a motivated commercial partner with financial KPIs and strong business links. Recognise the importance of investment in this area.	Lacklustre academic interest, lack of control/ interest, lack of scale, lack of maturity. Lack of interest in engaging except for sharing good practice and joint funding opportunities.

Interviewees were also asked to comment on potential incentives to taking part in a shared model, largely providing the flip side to the barriers and constraints and in large part in agreement with commentary from the survey.

- Funding (grant funding and on-funded, PoC and accelerator funding),
  - The potential over time for revenue sharing
- Levels of support with free access to shared good practice and a paid offering for consultancy or expert support. Packaged offerings accessible to smaller HEPs.
- Government endorsement, leadership and motivation from policy makers, funders, HEP senior leadership prioritising SHAPE enabling broad portfolio HEPs to better engage with SHAPE commercialisation.
  - A clear cost benefit case for society
- The right price point to 'sell' to internal stakeholders.
  - Minimal bureaucracy, clear SLAs
- The ability to create new collaborations across HEPs and between services and researchers.
- Upfront on the benefits for academics and support services: peer to peer networks, case studies, success stories from other HEPs illustrating HEIF and other KEF metrics.
- Capturing the good practice/continual improvement helping to incentivise academics and professional services.
- Good publicity which may stimulate partnerships locally and internationally.

Many of the points regarding enablers and barriers made through the survey and interviews were also mentioned in the Focus Groups, particularly with regard to how the shared support would be funded, different regional and national priorities, the ability to develop good practice, the importance of legal frameworks and the difficulties that may be encountered across nations particularly with regard to legal frameworks, and the difficulty of mindset change among academics if the service was outsourced.

Conclusions and Considerations

The survey and interview data sources compared well, with clear overlap in findings (potentially as the questions were open for both parts of the consultation. Focus group views were also similar with greater emphasis on differences between devolved nations, e.g. on legal frameworks, language, already existing procurement frameworks (where the experience of collaboration was viewed positively).

A number of factors were viewed as potential barriers but also enablers (if they are overcome) for sharing models and sharing in practice. These include:

- Funding (from grant funding, to PoC, to acceleration funding),
- Resources (almost all HEPs who engaged in this process highlighted their resource constraints (funds, capacity, time), particularly for commercialisation where business cases are more difficult to make, as is often the case for Social Sciences and Humanities research in particular.
- Confidentiality around IP, relationships, competition, good practice, etc, for which SLAs and other collaboration agreements will be required.
- Trust – for academics and support staff when working with external parties.

Each of the above could prevent engagement with the sharing process, but if managed may also enable sharing.

Looking at other examples of shared commercialisation and collaboration between HEPs (see detail in **section 6.2.5** above), what the majority have in common, certainly the multiple CCF projects mentioned, are grant funding to support the collaboration through its initial years (3-5 years in the case of Aspect before its funding model changed). Others (small collaborations for e.g. IP4U) are between HEPs of similar maturity and size, where competition is not an issue between them, but where all members can benefit from the innovation network created. The collaboration supported by Big South London was beneficial to the HEPs in South London, and to the local economy resulting in a shared funding model between the City of London, London Boroughs and the HEPs. Some smaller collaborations between HEPs from different KEF clusters but closely co-located can succeed based on HEP benefit sharing (academics and professionals).

6.2.7 Other reflections and takeaways

Research Theme: Final questions.

What did participants think was the most important points to remember when addressing these questions about opportunities for sharing SHAPE TTO services?

Survey Questions

- **Q26.** Is there anything else you would like to tell us that we haven't asked about?

Interview Questions

- **Q11.** Anything else - Is there anything else you would like to tell us that we haven't asked about?
- **Q12.** One key takeaway - We talked about a lot today... if there was one thing you'd like me to take away from today's conversion, what would that be?

Focus Group Questions

- Sharing models and devolved nations specificities

These questions were asked as open questions at the end of the survey and interview, providing participant with the opportunity to share what they felt were key points that they may not have had the chance to make. Taking the outputs from both interviewees and survey participants together, the following key themes emerged.

1. **Capacity and Resourcing Constraints** – Many Higher Education Providers (HEPs) feel stretched and under-resourced, especially smaller institutions. There's a strong desire to collaborate but limited internal capacity hampers this. Shared services are seen as a potential solution, but only if designed to be accessible and sustainable.
2. **Leadership, Strategy, and Structure** – A recurring message is the need for clear leadership and strategic alignment at institutional and sector levels. Participants emphasise that SHAPE commercialisation must not be an afterthought but embedded in broader impact and innovation strategies.
3. **Value of SHAPE and Need for Differentiation and Collaboration** – Respondents repeatedly highlight that SHAPE commercialisation is structurally and culturally distinct from STEM and requires far more 'handholding' for the academics with routes to market that can be very different from those typical in STEM commercialisation. They argue that bespoke models are required—recognising social, civic, and public sector impacts, not just financial return on investment. However, the point was also made that the opportunity for co-development between academics in different HEPs and bringing together STEM and SHAPE research in interdisciplinary would also be valuable.
4. **Shared Services, Peer Learning, and Support Structures** – There is strong support for a shared TTO model, with peer-to-peer mentoring, training for academics and TTO staff, specialist advisory access, and a mix of universal and bespoke tools. Ideas include secondments, shadowing, buddying systems, and tiered service models to ensure wider uptake and effectiveness. Survey and interview respondents noted the importance of mindset change among academics who may not view themselves as entrepreneurial, but who will be needed to engage for this shared service to succeed.
5. **Proof of Concept (PoC) Funding and Investment Ecosystem** – Access to SHAPE PoC and Accelerator funding is a major concern, with doubts about equitable competition with STEM ventures. Respondents seek ringfenced funding, more knowledgeable investors, and advocacy for SHAPE research, funding structures and metrics. In addition, a service that highlights or signposts funding opportunities (grants, sponsorship, investment) would be very beneficial.

Conclusions and Considerations

In large part the points made via the survey and interviews were the same, similar and overlapped.

The feedback from participants in the consultation revealed a strong appetite for a shared SHAPE commercialisation offering, underscored by a need for strategic leadership, tailored models that support specialist and geographic differences, and with SHAPE ringfenced funding available to all. Participants in the consultation see the potential for a transformative, collaborative ecosystem—provided it's well-resourced (specifically as it becomes established), sustainable, and reflects the potential for SHAPE research impact within the economy and society.

To succeed, the initiative must address cultural nuance (specifically between HEPs), resource disparities between HEPs and between STEM and SHAPE commercialisation support,, and systemic barriers, ensuring that good practice and support can be shared in a coordinated, forward-looking approach that empowers institutions and amplifies the societal value of SHAPE research.

6.3 Appendix 3: Further thoughts on sharing approaches

In **section 4.4** we presented a list of activities identified during the consultation as priorities and/or areas where sharing could have benefit for the sector. Then in **section 4.5**, we presented a summary table (**Table 1**) outlining initial thoughts on sharing models to address each need. The following section expands on the ideas in that table. These ideas were strictly presented to prompt discussion and reflection for the workshop in April 2025, not as specific recommendations.

6.3.1 Peer-to-peer support

- **Model:** Informal, ad-hoc networks based on existing collaborations, or a national database with active community engagement
- **Example:** KEUK Special interest groups, Aspect Communities of Practice
- **Resource Requirements:** Low to Medium
- **Risks:** Time and willingness of people to contribute; Confidentiality concerns; requirement to build a critical mass before it becomes useful; overlap with existing networks
- **Mitigations:** Platform to ensure burden of providing support is shared equitably

With a lack of established good practice to draw from, and the observation that there are often very few SHAPE commercialisation staff within even larger institutions with whom to share ideas, the power of peer support networks to offer informal help and advice becomes understandably important.

Sixty-eight percent of interview respondents mentioned that peer networks would have value. These points were often discussed in the context of building networks in specific sectors (e.g., creative economy), shadowing, mentoring, secondments, and even entrepreneurs in residence. Interviewees were incredibly positive about the value this could bring in building capacity whilst at the same time as providing much-needed support. Some respondents also mentioned peer-to-peer support and/or communities or practice for academics. Given the breadth of what a "peer network" could mean, below we explore a few models and options, noting that there are probably several other ways this could also be addressed.

Peer networks and support is at the heart of what the Aspect Network already aims to do; however, we have also heard from new members joining the Network that it can be hard to come in and get involved and know who to talk to as the Network grows and gets bigger. Some ways in which the Aspect programme has proposed to overcome this is via a "buddy system", whereby newer members are paired up with more established members have a "go-to" person they can contact for with questions; and via bi-annual "forums" where members get a chance to get to know each other whilst also learning and tackling important discussion points.

Outside of Aspect, other opportunities for networking come through IAA events, and through special interest groups (PRA SIG, ASTP SIG) and consortiums (IMPACTU, etc.). At a minimum, one solution could be simply raising awareness these other mechanisms for peer learning and support exist (e.g., having a central and well-promoted website where those TTOs can go to learn more about available supports in the UK).

A more structured approach could be a database or directory. For example, a secure place where TTO staff could create a profile listing areas where they feel they could share knowledge or expertise, and areas where they are looking for support. Those seeking support could then use that platform to connect with relevant parties.

The authors are aware of similar platforms that are used to help build these kinds of connections. For example, US universities use similar platforms to facilitate interactions between students and alumni, enabling students to find alumni that can help them with career goals or questions. Another example is community platforms used for facilitating connections between cohorts on acceleration programmes. The risk or challenge with any of these platforms is building a critical mass of participants. Another risk is potential duplication with other community or networking platforms (e.g., the KEUK forums are also used to post and respond to questions).

There may be a moderate case for regional and disciplinary specialism across peer networks, as understanding of the regional context or particular disciplines may be important, given what the interviews highlighted with respect to the importance of understanding institutional context, and for the need for advice/support to be

tailored to the discipline in question, with a particular note on Arts specialist institutions having support requirements that require particular domain knowledge.

6.3.2 Case studies

- **Model:** National repository with standard template; or informal sharing.
- **Example:** AUTM deal terms library; and/or Aspect Knowledge Shares.
- **Resource Requirements:** Low to Medium.
- **Risks:** Willingness of people to contribute; Confidentiality concerns; Lack of confidence/ lack of completed "successful" examples in the sector.
- **Mitigations:** Recording them as presentations (to capture talking points); using a model of share to receive; providing oversight/ coordination to help those with projects articulate/ extract relevant points suitable for the intended audience.

There have been multiple initiatives over the last 10 years to generate a library of case studies with examples of successful (and unsuccessful) commercialisation described in sufficient depth for lessons to be learnt/applied. These initiatives have achieved limited success, and we share our reflections on what has been learnt from them in Box 2 below. Taking into considerations those learnings, we propose two models for sharing case studies and related training materials.

One model is that used by AUTM (The Association of University Technology Managers, based primarily in the US) to generate their repository of deal terms. In this model, everyone contributes one example, even if the example is not a completed story. Contributing an example is required to access the whole repository. This would require resource to oversee consistency/ quality and manage the process.

A less formal model could be knowledge-sharing arrangements, e.g., via communities of practice or special interest groups, where case studies are presented on a regular basis and recorded (to address the noted challenge of people needing "speaking points" on the cases). This has the advantage of allowing tailoring to regional or disciplinary context. The risk here is potential inconsistency in the approaches taken; one mitigation could be to fund an external provider to take the lead in curating these cases in a format suitable for training/ learning for the intended audiences.

Box 2: Learnings from past projects to create SHAPE commercialisation case studies

There are several mechanisms by which informal sharing of case study examples has happened over the past 10 years (Aspect Network, PRA SIG, ASTP SIG); as well as formal and sometimes funded projects to generate examples and libraries of case studies (Aspect, UKRI, PRA SIG), which have met with limited success.

Based on our knowledge of these past projects, they have faced two main challenges:

1) TTOs wish to use these case studies for different purposes, which require different formats.
    a. Awareness raising - To show to academics (and potentially also senior leadership) the potential for commercialisation; and often specifically, to show what it could look like in their discipline.
    b. TTO Training - For TTOs to learn and/or upskill their own teams in the "nuts and bolts" of a SHAPE commercialisation journey, and different routes to market.
2) Identifying relevant examples.
    a. Limited volume of examples - Many TTOs still have fairly limited numbers of "complete" examples and/or several noted they don't feel confident that they can share useful examples.
    b. Limited benefit to the sharers – For those sharing the examples, they often require first-hand knowledge to repeat the story which has limited value to them personally.

Based on this, we suggest that any models for generating this shared library of case studies should take these points into consideration:

- How will the library be populated and the start, and then how will it be maintained over time?
- What is the motivation for contributing to the library?
- Where might the resources be housed, and are there existing places this could live, or is there a need for a new repository?

We also note that a previous Aspect-funded project titled Train-the-Trainer laid out an action plan for generating this repository of case studies and training materials. The project did not have further funding to enact the plan, but the insights from the plan could be revisited and built upon.

6.3.3 Good practice and policy sharing

This need encompasses examples of materials and internal policies that are not template documents, but represent successful practice that could be adopted by other HEPs.

- **Model:** Informal, ad-hoc networks based on existing collaborations, or a national database with active community engagement.
- **Example:** Aspect members' hub with outputs from funded projects.
- **Resource Requirements:** Medium to High depending on level of ambition.
- **Risks:** Difficulty of gaining consensus given maturity level and wide range of potential ventures; reluctance to adopt policies created for other institutions/contexts.
- **Mitigations:** Documents are not presented as 'best practice' but as a means of shortcutting creation of new documents. Access to people (to further explain rationale) helpful – could be integrated with peer network activities.

Given the relatively early maturity of SHAPE commercialisation and the consequent lack of standardisation or even existence of policies at many institutions, this is a particularly valuable form of sharing, which has a clear efficiency payback. There are well-established existing repositories of information and platforms that could be expanded to host this material (such as the Aspect members' hub, ImpactU documents, etc.) One potential complication to be addressed is the need for such policies to be tailored to not just the institutional context, but also the national one – for example, a spinouts policy designed to comply with the recommendations of the spinouts review (as required for some English funding) may not be required or desirable for institutions in the devolved nations.

For 'non codified' good practice sharing, we note it is notoriously hard to codify informal, implicit knowledge. At the less formal or codified end of the spectrum, the proposed peer support mechanisms outlined in **section 6.3.1** above may be more appropriate.

6.3.4 Template documents

Here we mean the creation and adoption of standardised templates covering common scenarios, such as innovation disclosure forms, heads of terms for licencing agreements, etc.

- **Model:** 'Bottom up' - A repository of documents similar to 'good practice and policy sharing', or a more 'top down' sector-wide effort to agree on and adopt standardised templates.
- **Example:** Brunswick or Lambert agreements.
- **Resource Requirements:** Low to High, depending on level of ambition.
- **Risks:** Resource requirements, willingness of people to contribute; Confidentiality concerns; Inability to reach consensus, low adoption, ongoing burden of maintenance.
- **Mitigations:** Could try blended approach – start with 'bottom up' repository of internal-facing documents, then undertake work to analyse common practice to develop templates, and expand to external facing ones (e.g., licencing agreements). There may be opportunity to leverage AI to complement/support this (and this is being explored to a certain extern through at least one of the other RED CCF projects).

In a similar fashion to a good practice repository, an initial attempt at sharing templates could be hosted by a sector body such as KEUK, Aspect, or a funder. It would then be important to ensure a critical mass of people who want to participate in sharing their documents.

However, a greater challenge will be the analysis, creation and adoption of standard templates. This would require dedicated coordination effort, involving a wide range of HEPs and other stakeholders (for example, funders, potential collaborators, licensees and investors).

There are additional considerations for both different disciplines (e.g., with the arts having notably different custom and practice around collaborations and other forms of IP protection such as performers' rights) and across the devolved nations, where differing legal frameworks may need to be considered.

6.3.5 Academic training/awareness-raising

- **Model:** Jointly designed and delivered training/ awareness offering.
- **Example:** Aspect training offer – needs jointly defined by members, then courses designed and delivered at scale.
- **Resource Requirements:** Potentially High: Coordination to elicit needs, then content creation.
- **Risks:** Hard to address needs of a diverse range of HEPs at different stages of maturity; insufficient tailoring to their specific context. In addition (as the Aspect network has experienced), there is a practical need to cap the number of people attending training in order for those sessions to be effective. While this increases the quality of the training offer, it necessarily limits the number of people who are able to benefit from it.
- **Mitigations:** Prioritisation of most common/ pressing training needs; provision of material (and not delivery of the material) to allow local tailoring, thus preserving cost saving, given the significant development time/cost for new training material.

Training came through strongly in the consultation as something respondents saw value in sharing, with clear efficiency gains though doing so. However, the data sources also highlighted that most still felt it was important to retain the relationships with the academics within the individual HEPs. We note that shared training does already exist in the sector (e.g., Aspect training, the ImpactU HUB, ATTP accredited courses on SHAPE commercialisation, other courses from independent providers, and the training component of the UKRI SHAPE Catalyst) but that some of this is fee-based, which as noted can be a barrier for many HEPs. Some respondents were also unaware of this existing training, pointing to a different challenge around ensuring information about available resources is better disseminated.

There is a case to be made for training needing to be tailored to both geography and discipline. For example, training on access to finance may require different content depending on the regional funding situation (particularly in the devolved nations) and regional investment opportunities, whilst different disciplines may also have different funding routes available.

6.3.6 Specialist support: Triaging opportunities; Mentoring on routes to market; IP/legal advice; fundraising advice/access to investors

- **Model:** Procurement framework/pool of advisors.
- **Example:** Other shared services models/ framework agreements.
- **Resource Requirements:** Medium-to-high (requires coordination and set-up, plus ongoing management of suppliers).
- **Risks:** Variability in quality of advisors/ mentors.
- **Mitigations:** Higher initial set-up effort (and requirement for a procurement framework to be 'owned' by a legal entity) could be mitigated by starting with a voluntary directory of suppliers, although this could reduce the promised cost-savings.

Several of the proposed sharing areas involved bringing in external advice or support and highlights one area where economies of scale could be realised through a procurement framework or structured offering for the sector, covering IP, legal and miscellaneous business support services. This could include individuals or organisations with specialist knowledge of appropriate business models, routes to market etc. for SHAPE ventures. This seems to be particularly relevant to HEPs who have successfully stimulated a pipeline and now require additional support as ventures progress.

SME support programmes and entrepreneurship mentoring programmes could be used for inspiration in designing an approach. For example, the former Growth Hub programme was able to secure significantly reduced rates from a pool of SME advisors because these advisors were likely to get regular business by participating in the programme. Other models known to the authors is the framework agreement used by the University of Oxford's technology transfer offices, where IP firms bid to be included in a limited pool of preferred suppliers. The pool model ensures access to breadth of skills, whilst still allowing for preferential rates to be negotiated. An alternative (or complementary) approach could be peer-to-peer support (see **section 6.3.1** for more on this.)

Some participants in the consultation also expressed the need for help finding investors. This could be in the form of Angel networks with an interest in SHAPE ventures, VC

and impact investors and investment from the public or third sectors. This could take the form of a directory of such investors (though this would require diligent ongoing maintenance to optimise its utility), leveraging the Aspect Angels Network in some way, and/or involve showcasing opportunities such as those provided through fora like **reSHAPE**.

Like many other potential areas of shared support, there will be both a geographic and disciplinary angle, with the value of face-to-face interactions being noted particularly when it comes to interaction with academic staff.

6.3.7 Acceleration services

- **Model:** Expanding or adapting existing pre-acceleration and acceleration programmes (SHAPE or non-SHAPE); or Development of 'train the trainer' models to allow individual HEI's to run internal (pre-) accelerators i.e., through the TTO or other on-campus enterprise programmes; or alignment or collaboration with other existing place-based initiatives to enable better access to business community to create company founder networks.
- **Example:** UKRI SHAPE Catalyst, SETsquared; numerous public and private providers.
- **Resource Requirements:** High (for organisation providing the service), medium to high for participating HEPs, especially where TTO staff are required to participate.
- **Risks:** Academic workload presents barriers to participation; suitability for wide range of potential SHAPE ventures.
- **Mitigations:** Alignment of enterprise with impact activities to incentivise HEP leadership to encourage participation.

As noted, the UKRI SHAPE Catalyst provided by ARC has been extremely successful in providing not just training and awareness raising to academic staff but also providing a comprehensive acceleration programme which was heavily over-subscribed, suggesting that more such services are needed. There is also a compelling case for such services being shared (rather than being operated by a single university exclusively for their own ventures) as a) even large institutions may not be able to identify a reasonably-sized cohort regularly (e.g., the Catalyst accelerates approximately 25 ventures annually) and b) there are benefits to larger cohorts from different institutions in terms of cost-efficiency but also cross-pollination of ideas etc.

One potential model is for a larger institution to open up its programme to other (possibly regional) universities. This has the benefit of lowering the cost for all, whilst retaining a regional cohort. A potential drawback is the perception of 'ownership' by the lead institution, or fears about IP leakage. Another variation of this model which has seen significant successes builds on existing collaborations to provide shared venture support (e.g., SETsquared), which uses both the member institution's own resources as well as public funding. Such collaborations can also extend into other services such as business and investor networks, training provision etc.

Other models may rely on private providers entering the market with SHAPE-specific accelerators, which may have a model that includes a fee, equity sharing, or other features.

At the current level of maturity of SHAPE commercialisation, and the very wide range of routes to market for SHAPE ventures, we do not wish to recommend a particular model. Indeed, the myriad existing accelerators may prove suitable for some SHAPE ventures. Whilst there seems to be some distinct advantages of shared regional acceleration programmes run by consortia of institutions built around existing collaborations, a mixed market with multiple options seems most desirable for now.

6.4 Appendix 4: Workshop outputs

A 'Validation Workshop' was held on 29th April 2025, where feedback was sought from the sector on the findings and solutions presented in this report. The event was attended by 30 participants, including the six project partners.

This workshop was the culmination of the project, and it aimed to invite input from practitioners from across the knowledge exchange and commercialisation community in the UK, to validate the conclusions and refine the proposals for shared approaches for supporting SHAPE commercialisation. Stakeholder participation would ensure that insights from the review reflected their views, and that recommendations from the project were co-created, community-informed interventions that would best address collective needs, enabling funders to make informed decisions about how they can best support efforts to drive impact through SHAPE commercialisation and spinouts.

This section contains the agenda along with notes and summary takeaways from group discussions held at the workshop. The implications of these discussions are presented in **section 5** of this report.

Box 3: Event agenda for the Validation Workshop on the project findings (Tuesday 29th April 2025, RCA Battersea campus, London)

10:00 Arrival and coffee

10:30 Welcome and Presentation of Findings

- Results from the stakeholder consultation, and initial conclusions.

11:10 Workshop 1: Introduction to shared approaches

- Exercise for participants to select challenges/interventions most important to them.

11:40 Coffee break & Project prioritisation

12:00 Workshop 2: Developing shared support (What)

- Breakout groups with facilitators to clarify and refine/ narrow the scope of the proposed intervention, using the following structure:
  - What - What might this include? How would you describe the scope of it?
  - Why - Why is this needed? What else is already out there, and why isn't that sufficient?
  - Who - Who needs this most/ least? Does this vary by type of organisation, certain characteristics, etc.?

13:00 Lunch & Poster Session

14:00 Workshop 3: Delivering shared support (How)

- Breakout groups with facilitators to describe how the proposed intervention could be implemented using the following structure:
  - Description of how model might work (building on examples/ ideas in the skeleton draft)
  - Examples of how this works elsewhere.
  - Resource needs (partners, funding, etc.)
  - What else in the ecosystem could do it?
  - Could this happen without sharing?

15:00 Wrap up and Next steps

- Plenary session to recap the day and gain support for future activities.

15:15 Refreshments & Poster Session

Table 9: Notes from plenary discussion about the project findings

Topics	Notes
Overall reflections	• "See one – Do one": Can I follow this route? Difficulties in dipping toe in doing phase. Case studies could be useful for this. • All options are HEI 'self-help' but there comes a point when you need to go 'outside' to 'business land'. Need to connect or access 'useful people who know about certain subjects' (i.e. expertise). • The 'dream' would be to have a 'queue of academics at my door who want to commercialise and make money'. This was caveated that innovating could be a means of 'protecting' the work even if the academic wants to 'give it away' further down the line. • Again, desire for case studies: Examples (e.g. REF impact case studies) who's impact was 'extended' or 'sustained' via the commercialisation process. • Educating researchers whilst avoiding commercialisation/business dirty word, especially for academics. Example given of ceramics creative who 'didn't do business' but had supply chains, means of marketing, promoting selling, submissions to companies house, etc... Everything you would ordinarily do as part of a business. • What about the background of those working in commercialisation? Do those working in SHAPE come from SHAPE backgrounds in the first place? • Counter to a model where a Large/Mature HEP hand-holds a smaller university: Smaller universities can have broader spec then bigger ones! 2-way street.

Table 10: Notes from group discussion on Peer Support

Topics	Summary and Notes
Summary Number of participants: 4 Facilitator: Hamish McAlpine, Oxentia Ltd	It was noted that peer support could be aimed at academic or professional services staff. There was a feeling it could be either or both, depending on the context. A strong rationale for why these groups are needed is that no single institution has the critical mass of SHAPE-specific commercialisation staff to enable effective peer support on their own. It was felt that such peer support groups could be organised around roles (e.g., academic or professional services staff, or staff in similar functions, or at similar career levels) to encourage open sharing of experiences from true peers. There was also some discussion on the value of the network itself, with one of the groups cautioning on making such groups too outcome focussed. All agreed that support (even if non-monetary) from senior leadership was important for legitimacy and to encourage participation. Such support would also provide a natural outlet for issues raised, or successes identified. The 'how' might this be achieved largely followed well-accepted practice for setting up communities of practice and similar – at its simplest, existing networks (e.g. ARMA, Aspect, KEUK) could be built out, and platforms such as LinkedIn can be used. In a higher-resource scenario, travel and in-person meetings could be supported, the functionality of online platforms enhanced, and central coordination provided. 1:1 peer mentoring could also become possible, alongside peer support groups.

Table 10: Notes from group discussion on Peer Support (continued)

Topics	Summary and Notes
What *What might this include?* *How would you describe the scope of it?*	• Recognition that the process and the network itself was as valuable as the outcome: don't over-prescribe what the outcomes should be. Having said that, others felt some direction or aim for the group could be helpful. • Support could take the form of peer-to-peer groups. These could be around a theme (e.g., an accelerator programme) or be modelled on CoPs around a wider theme, or could be structured around a challenge, and specifically bring academic staff together with HEPs senior leadership (prevents siloes). • Feeling that peer networks with staff in similar roles/seniority also important, to facilitate open sharing of ideas/issues etc. – true 'peers'. • Buy-in from senior leadership important for legitimacy. • Some discussion of whether peer support was many to many, 1:1 (e.g. peer mentoring) or both.
Why *Why is this needed?* *What else is already out there, and why isn't that sufficient?*	• Due to there being relatively low levels of activity and dedicated SHAPE staff, peer support is critical to build a critical mass of people that even the largest universities lack. • Peer support underpins or informs other areas, such as good practice sharing. • Could be a powerful way of overcoming perception barriers amongst academic stuff.
Who *Who needs this most/least?* *Does this vary by type of organisation, certain characteristics, etc.?*	• Post-92 institutions, with core focus on teaching and student benefit might benefit a lot. • Other than that, it was felt that such networks would benefit organisations of all types, with the usual caveat that some at a higher level of maturity might feel they are doing more 'heavy lifting' in terms of intellectual contribution. Unclear how to mitigate.
How - Low Resource model *Description of how model might work (Examples, Resource needs etc)*	• At its simplest, this is a largely self-organising network, which could be built out by existing bodies such as Aspect, ARMA, KEUK. • It was felt establishing a clear terms of reference was important. • Could use existing infrastructure like LinkedIn.
How - High Resource model *Description of how model might work (Examples, Resource needs etc)*	• All of the above, plus more budget for travel/in-person meetings. • Could consider some sort of central co-ordination role – e.g. to set objectives, advertise and onboard people etc. • Additional resource, including potentially time buy-out could enable peer mentoring network. • Expanded functionality of online platform to support activities. • Dissemination of outputs of networks to senior leadership in form of e.g. briefing papers, cases for more resource, success stories etc.

Table 11: Notes from group discussion on Case Studies

Topics	Summary and Notes
Summary Number of participants: 5 Facilitator: Josef Walker, University of Leicester	Case studies that showcase SHAPE commercialisation need to be effectively tailored to the needs of different audiences: academics to encourage participation and engagement, research funders to encourage investment and senior institutional management to secure support and enable exploration of opportunities, including those that might be new or different to past projects. Access to case studies should be via a managed searchable online resource with some level of quality control and ideally augmented by AI tools to help check, refine and create cases studies, thereby reducing the barriers to contributing and increase the coverage of different subject areas covered. Case studies are needed as they provide key evidence to explain the value and impact of such activities to all key stakeholders as well as being a critical tool for bringing theoretical training into the practical domain. A shared approach is necessary as individual HEPs typically lack the critical mass to provide a sufficient breadth, depth and quantity of case studies on their own, to have the same level of tangible impact that a collective library could achieve; current resources such as ASPECT are limited in terms of volume and accessibility. All players in the SHAPE commercialisation theatre would benefit from access to such a library of case studies and also be leveraged by HEP press teams to further promote them to a different and wider audience, increasing the impact footprint. An MVP could be created with limited funding if HEP's were willing to contribute case studies and volunteer time to quality control and manage the library. Minimal funding would be required for the design and hosting which could be raised through shared low-level contributions from each HEP, commercial sponsorship or possible using IAA funding. A more complete and extensive product would require funding akin to the RED CFF call which funded this project and could be made sustainable through charging fee to commercial users and/or overseas HEPs. It will be important to ensure that an integrated approach is taken to any new developments; the case studies will have lower impact if implemented alone and should be aligned with other programmes such as training and peer-to-peer networks for maximum effect.
What *What might this include?* *How would you describe the scope of it?*	**Overview** • The purpose of cases studies varies depending on the target audience. • A good case study will have all the information needed by each audience and can be variably presented in each instance. • Three key audiences identified: 1. Academics and researchers 2. Research Funders 3. University Management **Case Studies for Academics and researchers** • **Purpose** is to demonstrate value/benefits of commercialisation to individuals who are new to this activity.

Table 11: Notes from group discussion on Case Studies (continued)

Topics	Summary and Notes
	• Such case studies need to: 1. Be relatable -provides some personal connection to clearly show how they may be able use the project as a reference point for their own project 2. Help them to overcome 'learnt helplessness' and upskills them whilst providing information. 3. Be subject specific – providing insights into specific challenges in a given field or sector. 4. Include the perspective of the customer or clients – interviews with commercial partners are a good example. 5. Be personal – including comments and/or interviews with the academics/ researchers. 6. Show a direct link to impact – demonstrating the value of commercialisation as a route to impact. 7. Be easy to use by KE professionals and/or other academic champions. **Case Studies for Research Funders** • **Purpose** to encourage funders e.g. UKRI to invest (more) to support SHAPE commercialisation. • Such case studies need: 1. To demonstrate impact of commercialising SHAPE research outputs, both social impact and commercial. 2. Include clear references to the research that was funded by the target audience. **Case Studies for University Management** • Purpose to provide information about SHAPE commercialisation projects to help inform decisions and actions that need senior management support, especially where KE teams are trying something new for the first time at the Institution - insight to clear internal hurdles and allay fears by showing others have achieved success. • Such case studies need to: 1. Introduce the leadership team to the opportunity, the impact and benefits (including financial). 2. Describe the different parts of the journey e.g. pre-incorporation trading, who was involved, how were risks managed. 3. Talk about impact (including financial) in terms that are accessible and relevant to senior leaders such as clear links to HEIF, KEF, REF. 4. Help inform senior management to make governance decisions to enable other SHAPE commercialisation projects progress. **Form** An MVP would need to comprise: • A searchable online catalogue of case studies. • Minimal meta data associated with each case study.

Table 11: Notes from group discussion on Case Studies (continued)

Topics	Summary and Notes
	It would need to be regularly updated. • Case studies would need to be well illustrated. • Ideally there would be some video content e.g. interviews associated with/part of each case study. • Some basic quality control. An advanced/more developed product might include: • Using AI tools to: – Prepare different use versions of a case study from a single source e.g. academic use and management use. – Create case studies from other documents e.g. papers, presentations, end of project reports to funders etc. – perform some automated QC academic use and management use. – Create case studies from other documents e.g. papers, presentations, end of project reports to funders etc. – perform some automated QC • Full QC framework and oversight • Integration with training platforms/resources • Peer-2-peer network features to enable users to contact case study owners and seek follow-up/advice.
Why *Why is this needed?* *What else is already out there, and why isn't that sufficient?*	• Case studies help to bring SHAPE commercialisation to life and out of the silos where it tends to reside at the moment. • Training can be too abstract in isolation – case studies are needed so that stakeholders can more easily relate to and therefore engage with the subject matter. • A shared approach is needed as individual institutions typically do not have the critical mass required to generate a broad portfolio of cases studies – this can only be achieved through collective working. • To help support pipeline development by providing examples that KE/TT practitioners can use to identify similar or related opportunities from their own research landscape. • It is important to be able to show the very diverse range of outputs/impacts from SHAPE projects in order to be better able to inform and influence future funding and policy. • There is desire from senior management to be able to replicate other's success, in part to generate income; case studies provide reference points to what might be possible if properly supported. • Despite the efforts of the ASPECT network, there are still not enough case studies to meet the needs of the community.

Table 11: Notes from group discussion on Case Studies (continued)

Topics	Summary and Notes
Who *Who needs this most/least?* *Does this vary by type of organisation, certain characteristics, etc.*	• All players in the SHAPE commercialisation ecosystem would be benefit from a robust library of case studies to help support activities across the value chain from ideation to deal-making. • Notably, they would also be a useful resource for University press teams, who would be able to further promote the stories of SHAPE commercialisation to more and different audiences.
How - Low Resource model *Description of how model might work (Examples, Resource needs etc)*	To create an MVP: • HEI's asked to contribute case studies and meta data • QC provided by volunteer network • Management could be done a volunteer/part-time basis • Minimum funding would be required for design and hosting • Funding could be raised through sponsorship e.g. commercial, possibly through crowd funding, pooling contributions from IAA awards • Could be funded by UKRI – mandated as part of requirement where funding used to support commercialisation (HEIF component?) It would be offered: • Free or minimal charges to use by UK HEIs (reduced fees for contributions) • Fees for commercial use e.g. consultants – they could pay licence fees for re-use of case studies or pay in order to be able to offer their services through the platform. • Fees for use by non-UK HEI's
How - High Resource model *Description of how model might work (Examples, Resource needs etc)*	To create an advanced product: • Dedicated funding would be needed to implement any advanced features and therefore something akin to the RED CCF would be required. • Sustainability long term could use the same approaches as the MVP but would need to include funding to cover dedicated support team.

Table 12: Notes from group discussion on Academic Training/Awareness Raising

Topics	Summary and Notes
Summary Number of participants: 4 Facilitator: Tatiana Schofield, RCA	The workshop highlighted the need for academic training in research commercialisation, particularly to raise awareness among researchers about the potential impact of their work through pathways like spinouts, licencing, and consultancy. Participants identified key training topics, including understanding IP, commercialisation basics, legal aspects, and managing partnerships with diverse stakeholders. A significant point was the importance of tailoring training to different academic career stages—early-career researchers (ECRs), mid-career, and senior academics—as their needs and motivations vary. The need for a shared, efficient training hub was emphasized, with benefits such as networking, collaboration, and cascading resources across institutions. The workshop also pointed out the current fragmentation in commercialisation training offerings, with existing organisations like ASPECT and ARMA providing only partial solutions. Attendees stressed the importance of offering both online resources, templates, and case studies, alongside the need for senior management buy-in to ensure long-term success. With limited resources, the model would focus on accessible, codified knowledge and self-service options, allowing for scalable impact while addressing the resource constraints of university technology transfer offices.
What *What might this include?* *How would you describe the scope of it?*	**Key topics for research commercialisation training** • Key routes (spinouts,licencing, consultancy etc) • Commercialisation Basics, e.g. what is IP, what is commercialisation • Legal aspects • IP management, protections, types, ownership **Key aspects for academic training in TT/commercialisation** • Roles and responsibilities, e.g. “who runs a spinout”, “who does what”? • Roles – “who finds funding”, “who finds customers” • Time, i.e. academic requirements and time commitment for different forms of commercialisation • Commitment – knowledge, time, resources, expectations • Support, e.g. What support is available? What resources are needed? • What needs to be in-house? Outsourced? **Multidimensional partnership landscape** • big companies, not-for-profit, SMEs to explore routes to commercialisation **Examples and case studies** • Who else has done this/similar approaches • How industry works, what do they want, what do they need

Table 12: Notes from group discussion on Academic Training/Awareness Raising (continued)

Topics	Summary and Notes
Why *Why is this needed?* *What else is already out there, and why isn't that sufficient?*	There is a **strong need for academic training in research commercialisation, technology transfer** due to: • lack of awareness from academics about impact potential through commercialisation • untapped impact both commercial and socio-cultural • current offering is fragmented • TTOs are time poor **Academic training in TT/commercialisation will enable to:** • cascade and signpost a shared resource • to amplify awareness • to gain senior buy-in to allocate resources • to ensure economies of scale and efficiencies **Benefits of a shared training hub include:** • networking opportunities • collaborative opportunities **Current organisations** which provide selected academic training in TT/commercialisation: • Aspect • ARMA • KEUK
Who *Who needs this most/least?* *Does this vary by type of organisation, certain characteristics, etc.?*	Academic training in TT/commercialisation needs **to target researchers at various career stages as their needs, experience, time availability and motivations** differ: • ECRs • senior academics • mid-career researchers • different research disciplines It would be important to **offer training for other stakeholders involved in TT/ research commercialisation:** • **senior management** to develop buy-in and scale up awareness • **professional services** to build internal capacity • **industry partners** to raise awareness about university-industry partnership and joint commercialisation routes • **local partners,** eg SMEs and communities to testbed innovation potential
How - Low Resource model *Description of how model might work (Examples, Resource needs etc)*	Academic training with restricted resources to be focused on systems and codified knowledge including: • online resources • templates • case studies • online modules • e.g. Aspect model

Table 12: Notes from group discussion on Academic Training/Awareness Raising (continued)

Topics	Summary and Notes
How - High Resource model *Description of how model might work (Examples, Resource needs etc)*	Key features for a shared academic training and capacity building based on a sufficient resource model: • **Focus on a tailored approach, bespoke programmes, relational aspect to support:** – more advanced stages of commercialisation/TT – more mature TTO models – larger scale commercial opportunities – peer learning – upskilling professional services • **National support, resources and regional advisors**, e.g. KTP scheme • **Seed investment funding,** e.g. Northern Gritstone • Such shared training programmes can be **incorporated within existing Acceleration facilities** • **Self-sustainable models** where partners agree to reinvest a small share of their profit /surplus into a shared TTO.

Table 13: Notes from group discussion on Specialist Support[4]

Topics	Notes
Summary Number of Participants: 9 Facilitator: Nick Ansell, LSE	Participants engaged in this topic represented a diverse range of HEPs in terms of geography, size and specialism. That said, participants all supported the points made for 'what' that support involves (e.g. opportunity testing/verifying, training/ bid writing, market development, etc.), 'why' it is needed (e.g. internal costs and resource barriers) and acknowledged that specialist support has a role to play for everyone. Those in most need however included smaller specialist HEPs and academics who are either disengaged or inexperienced. Ideas for how that support is delivered for these audiences included an external centralised team for ad hoc support (potentially acting as a help desk) which would benefit specialised HEPs or coaching/mentoring which might better suit academics. When discussing resource scenarios, the consensus was that whatever the delivery mechanism such support would have to be consistently funded and strategically guided by government, ideally with a long term 5 or 10-year plan. Given current pressures on HEPs, the responsibility cannot not fall on them at this time to establish new resources or networks, however the option of leveraging existing channels (Aspect, KE UK, TenU, etc.) was proposed. Overall, participants were highly engaged in this discussion, applying a broad scope to how specialised support could aid HEPs with SHAPE commercialisation, all the while remaining realistic about the status quo and their own capacities, therefore advocating for a top-down government backed intervention in this area.

4 There were two groups discussing this topic. There were limited notes recorded for the second group, but where available these have been marked as 'Group 2'.

Table 13: Notes from group discussion on Specialist Support (continued)

Topics	Notes
What *What might this include?* *How would you describe the scope of it?*	• Specialised support and expertise for validation to include: – Opportunity scoping – Market research – IP protection advice – Value proposition (identification and expression) – Opportunity viability (sense-check by individuals with market/sector knowledge) – Stakeholder Mapping – Training & Guidance – Bid writing – Tools for self-development & leveraging self sufficiency – Framework/map of life cycle for commercial projects – Support for translating academic stories into business & lay person language • Everyone has some experience but we need access to industry experts to provide that rubber stamp on the validation. • Could this come from alumni? (E.g. U.S innovation alumni connection system is very different. Vs UK gatekeeping). • 'Entrepreneurs in residence' – OU (Phil F); 2 years and counting; They will talk to all levels. It's a bit Dragon's Den(ish). Having that experience to call on and periodically sanity check ideas. 'Giving back to the university' > Alumni EiR.
Why *Why is this needed?* *What else is already out there, and why isn't that sufficient?*	• 'Sanity check' - objective opinions from experienced individuals who can speak with authority to better inform potential and commercialisation plans/ strategies to complement resource-poor in-house teams. • Existing providers are expensive and tend to be STEM focussed. • 'bridging the gap from research to business'. • Access to technological support. • Uncategorised comments: – STEM interest and uses of SHAPE elements [?] – 'Changing dialogue of what a successful venture looks like'
Who *Who needs this most/least?* *Does this vary by type of organisation, certain characteristics, etc.?*	• Everyone! • Large Orgs: Oxford Uni lucky owing to regional organisations working in SHAPE commercialisation. But they suffer from the same resource constraint with the scale of opportunity/demand (mixture of both). • Small specialist HEI's: lack of capacity but potential to reach critical mass due to smaller fields of exploitations – fewer markets, fewer experts possibly.

Table 13: Notes from group discussion on Specialist Support (continued)

Topics	Notes
How - Enablers *Description of how model might work (Examples, Resource needs etc)*	• Public Sector involvement [?] Needs clear Terms of References to guide 'what it is we're trying to do'. • Needs a driver from higher up: This is what we want to see, we will fund it but this is a shared support model. Something that has to be national/regional hubs. It won't happen without funding. • What is the competitive mechanism to drive innovation? Brokerage? E.g. Experiment.com... 'I want to do this'? Fund me.. A large amount of people are willing to pay a small amount of money to improve certain features.

How - Low Resource model
Description of how model might work (Examples, Resource needs etc)
	Group 1:
	• There are a lot of things that exist already. Making the best of what is available.
	• Creating/leveraging SIGs.
	• Maximise sharing among peers > Peer Support.
	• Existing networks: KE UK, ASPECT, Guild HE, NCACE, ImpactU, 10U, etc...
	• Leveraging a shared service. Could this be tied together with something existing (e.g. industry conference for 'university pitches')?
	• Mentoring – Peer2peer to utilise alumni. Risk of saturation of contacting unique alumni vs gatekeeping from single point of contact. Maybe mitigated via CRN (salesforce system). Keep track of enquiries coming on or going out = Organise a surgery with one company (1 morning with everyone in the room). 80/20 listening vs talking rule + then engage with the clients. Success in validation. Gave Business Development Unit power to say 'no'. Other success is they have a connection to the market. Or the 'not right now' but in 6 months' time lets talk again.
	• Mentoring, shadowing, etc.. Secondments.
	• Being part of impact investment networks.
	Group 2:
	• **KE UK** → 1.5 days per year of collective training
	• Similar to UK Police Model; one big conference per year
	• **Use existing networks** → Aspect / NCACE / ARMA / Social Value UK / TenU / ImpactHub / KTP Advisors / Innovation Caucus
	• "The Creative Destruction Lab" - People apply, pitch their idea to a group of sectoral experts as forums, progress through the year's program.
	• **Alumni networks** → Knowing how many academics are trying to access the network.
	• **Guild UK / Guild HE** → A specialist network for arts
	• **Shadowing, mentoring, secondments** from smaller TTOs into larger HEIs
	• **Social media usage**
	• Risk:
	  – TTO staff churn erodes institutional knowledge & sectoral knowledge.
	  – Loss of IP overseas & accidental dual use → reduced protections.

Table 13: Notes from group discussion on Specialist Support (continued)

Topics	Notes
How - High Resource model *Description of how model might work (Examples, Resource needs etc)*	Group 1: • Need for something that is fit for purpose 5 years from now. • Giving IP away (e.g. KTPs). The amount of money we make from IP is so small but we make so much more money from the relationships we make. See investment reports of these (WECD REPORT ON THE VALUE OF KTP, built on a report by Regenurus). E.g. Number of student projects + other contracts (consultancy or research) + more KTPs with companies. Essex backed theirs up with promotion (annual income of £2m from KTPs). Group 2: • **Consistent funding** with predictable support • **Spend money** to make sure the market is engaged in the process • **Professional service investment** to build sectoral expertise i.e. attract industrial experts into HEIs (could be expensive!) • **Got to be ambitious** (ten year vision) • **Academics brought out** to allow commercialisation to happen, as there is a pressure on time to deliver teaching • **Shadowing, mentoring, secondments** from one HEI to another or to industry • **Create a SHAPE "fund"** to act as investors → impact investment

Table 14: Notes from group discussion on Acceleration Services

Topics	Notes
Summary Number of Participants: 4 Facilitator: David Jordan, University of Lancaster	The discussion was limited and returned to the existing provision through the likes of the UKRI SHAPE Catalyst delivered by ARC and the benefits that come from an external provider managing to increase the breadth of experience that feeds into the workshops, as well as the benefits of peer group learning across institutions. Funding was considered a significant barrier to entry with resources such as Aspect Network, and anything done in-house would require new money or support in some form. Understanding of and routes into investment networks was identified as one further benefit of collaborative and externally managed specialists undertaking provision.
What *What might this include?* *How would you describe the scope of it?*	• Recognition that iCURE and ARC provide opportunities in this space alongside others but a discussion around scope and capacity suggested that these could not meet the totality of the demand. • Some overlap with academic training and awareness discussion where upskilling the EL and CS(Supervisor) was a significant part of the process of going through an accelerator programme. • Overall translational funding was identified as insufficient to meet expectations of impact and commercialisation. • Needs to plug into better networks of investment communities beyond deeptech and medtech.

Table 14: Notes from group discussion on Acceleration Services (continued)

Topics	Notes
Why *Why is this needed?* *What else is already out there, and why isn't that sufficient?*	• Hard to do in individual institutions – would lose out on cohort-learning and shared experience. • Time/compliance pressure that comes from being part of an externally managed programme with competitive access. • Funds needed for market exploration and developing understanding of product-market fit and the mentor/external support to recognise pivot opportunities.
Who *Who needs this most/least?* *Does this vary by type of organisation, certain characteristics, etc.?*	• Post-92 institutions, less research intensive orgs with limited internal commercialisation support, and especially those with limited budget for commercialisation. • These also have limited routes into investment markets. • Supports academic leads, TTO upskilling, lead PhD researchers, across academic disciplines.
How - Low Resource model *Description of how model might work (Examples, Resource needs etc)*	• Suggestion that this could be done at regional or cross-institution level if funding could be found and to enable an anchor institution to lead on behalf of a group. • Needs brand identification/awareness, necessary to get academic buy-in and 'value' recognition of programme. • Case studies and examples that arise from running programme across institutions need collating as they feed programme learning.
How - High Resource model *Description of how model might work (Examples, Resource needs etc)*	• Consolidate and expand on current offerings such as ARC but increase access by funding centrally and removing barrier to participation. • In most scenarios funding can improve the opportunity and access and better managed by buying in specialist management.

6.5 Appendix 5: List of contributors

The authors would like to thank all those who contributed to this project. The individuals below have agreed to be named as participants in the sector-wide consultation, and whilst other contributors have chosen to remain anonymous, their valuable contributions have been equally essential to this work.

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