

The background of the page is a large, abstract graphic composed of flowing, translucent red and pink liquid-like shapes. These shapes are layered and curved, creating a sense of movement and depth. The colors range from a deep magenta to a lighter, almost white pink. The overall effect is modern and dynamic.

# EPIS Phase 2 Evaluation

Final Report

**SAGENTIA**

This document is prepared for Scottish Enterprise

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Ref SE103

## Executive Summary

This report summarises the results of our evaluation of EPIS and the options for a rollout of the scheme across Scotland. As consultants we tried hard to both act as advocates for the scheme yet be open to the genuine challenges that expansion may create.

EPIS is a highly successful initiative for the University of Edinburgh which, on the face of it, should be expanded to other universities so that more people can benefit and more economic activity can be stimulated. But its success does not necessarily mean that it should, or could, be expanded. This report was commissioned to look at the issues involved in an expansion and to recommend a roadmap for the EPIS-type schemes in Scotland.

We discussed EPIS-type schemes with most universities in Scotland, and held two workshops in which all but one of Scotland's universities participated.

We concluded that the scheme **should** be expanded:

- The scheme generated widespread interest among universities.
- There is potential untapped demand. If the scheme were expanded into other universities, the extra promotion and extra networks of students, staff and entrepreneurs will undoubtedly unlock further demand.
- EPIS's emphasis on SMEs and the expansion of horizons beyond just commercialising university generated IP was broadly consistent with many universities' commercialisation agendas.

The expansion can only be moderate. The type of business supported – one which is dependent on access to university resources – remains a small proportion of start-ups. Until now, there has not been stiff competition to get onto the scheme. EPIS already recruits from beyond Edinburgh and its network, suggesting that demand will not simply scale with the number of universities participating. Accordingly we believe that the scheme could be expanded to two or three times its current size. Beyond that, it is difficult to believe that the quality of applicants and the prestige of the scheme would not suffer.

Considering the whether the scheme **can** be expanded, there are some important factors to consider:

- Universities are in competition with one another. Part of Edinburgh's commitment comes from EPIS being a flagship Edinburgh scheme. If all universities had their own scheme, there would be less competitive benefit. Finding ways to secure universities' commitment will be important.
- The scheme is entrepreneurial to its core. As with anything entrepreneurial, individuals matter. Any mode of expansion that eroded the entrepreneurialism of the scheme and the enthusiasm of the individuals would kill it.
- The success of Edinburgh's scheme is largely the result of enthusiasm of the team running EPIS. It is clear that they have different skills and qualities to conventional university IP commercialisation staff. Recruiting such individuals is likely to be a significant task.
- An individual with the entrepreneurial spirit to run an EPIS-like scheme will not be the sort of person to merely administer a scheme off the shelf; he or she will need the scope to create something unique.

- Some universities already have key components of the scheme in place, but not coherently organised into a single focused scheme as EPIS is at the University of Edinburgh. Any expansion needs to take account of universities' circumstances.

We conclude that the scheme **can** be expanded, but great care needs to be taken to preserve the features that have made EPIS so successful.

The workshops revealed a widespread appetite among Scottish universities to dip their toes into a scheme while not immediately committing to a major scheme of their own. We heard EPIS that the scheme is not always able to find departments in the University of Edinburgh to host their entrepreneurs. The first stage of a rollout would put these two factors together. It would be to encourage and enable EPIS to host entrepreneurs at other universities, while maintaining the entrepreneurial component at Edinburgh. This would be applicable in subjects in which the University of Edinburgh has no expertise.

The second stage of a rollout can progress along two different routes, each with pros and cons. Option A is to essentially replicate EPIS in a very small number of other universities (or clusters of universities). Option B is to create a stand-alone Scottish pre-incubation scheme.

Our recommendation is to first seek to deploy Option B, but only if a leader can be found and given enough autonomy, to build on EPIS and make it work at a national level. Unless such a leader can be found, and given autonomy, there would be a strong risk that Option B would become bureaucratic. It would become a national scheme alongside many others, but without the energy, enthusiasm and passion for entrepreneurship that EPIS has displayed. It is likely that the scheme would need to be set up as a company with the leader as the Chief Executive.

If these conditions cannot be met, then Option A should be followed. To generate commitment, universities should be encouraged to design EPIS-like schemes and bid for funds to run them. Only a few schemes would be successful in their funding request. In such schemes there is an issue of critical mass. It is likely that not all universities would be able to recruit enough entrepreneurs to reach the critical mass necessary for the scheme to be organisationally and financially viable. Collaborative schemes between neighbouring universities represent a way to increase numbers while sharing costs.

In considering this option there is some tension between replicating the EPIS model in other universities and allowing the scheme to be modified. On the one hand, EPIS as currently constituted is successful; on the other, universities need to have the scope to adapt the scheme to their circumstances. This is consistent with the need to maintain the entrepreneurial feel of each scheme.

In summary, the scheme can, and should, be expanded but any such expansion should preserve the entrepreneurialism of the existing scheme.

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# 1 Introduction and Terms of Reference

The Edinburgh Pre-Incubator Scheme (EPIS) is widely regarded as a cost-effective way of marshalling local resources such as academic departments and business people to help innovators take ideas forward. Our investigation of the scheme for SEEL in Spring 2006 indicated that it had already achieved significant commercial outcomes and a showed substantial leverage on public funds.

This follow-on project was commissioned by SEEL to evaluate the potential for an EPIS-like scheme or schemes to be rolled out more widely in Scotland, and to make suggestions as to how such a rollout could be achieved.

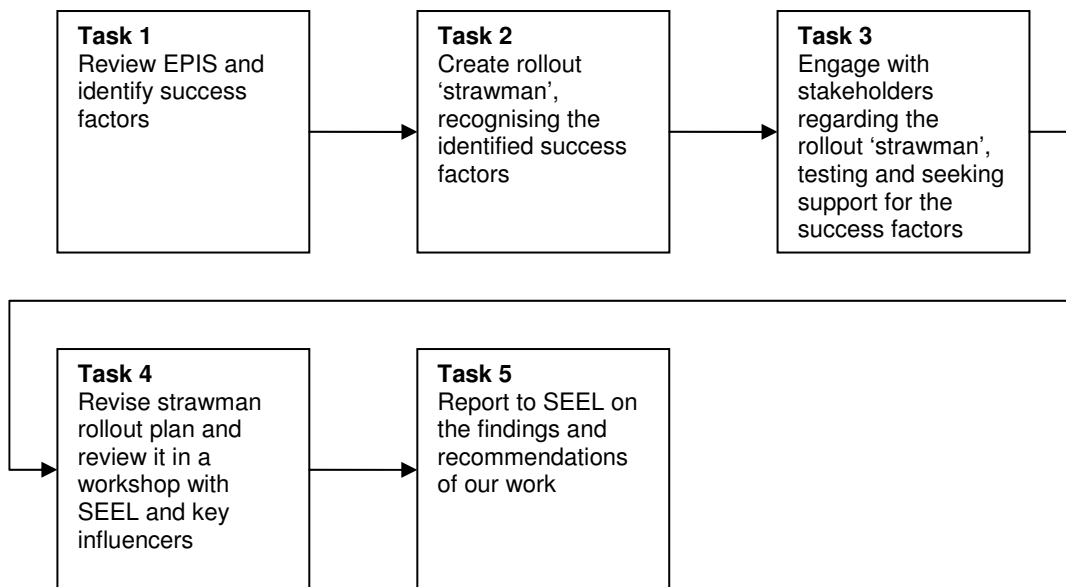
The main objectives were to:

- Research the size of the market across Scotland for EPIS-type activities
- Engage with potential stakeholders and HE institutions to establish whether or not sufficient interest exists
- Seek high level commitment from the interested institutions and stakeholders
- Propose a suitable model for the expanded scheme such that it would not adversely affect the current EPIS programme
- Estimate the optimum level of resources required to expand the programme.

The study commenced in December 2007 and the project ran through to May 2008.

## 2 Methodology

Our methodology is illustrated in the diagram below.



### 2.1 Task 1: Review EPIS and identify success factors

The thinking behind this task was that if EPIS were to be successfully rolled out, then the factors that have allowed it to be successful would need to be preserved. It would therefore be necessary to establish early on what those success factors were.

The Sagentia phase 1 evaluation of EPIS was a starting point, but because the fieldwork was conducted in 2006 it did need to be validated.

Telephone interviews were held in December 2007 and January 2008 with a selection of stakeholders, entrepreneurs and mentors associated with EPIS. The interviews explored the perceived value of the scheme and how it operates. Brief notes are included in Appendix A.

The interviews yielded a set of success factors to be taken forward to Task 2.

### 2.2 Task 2: Create rollout 'strawman', recognising the identified success factors

An EPIS-like scheme (or a plurality of such schemes) could be rolled out to other parts of Scotland in many different ways. For example, the rollout could be staged or extended to the whole of Scotland in one hit. If staged, it could proceed by city, metropolitan region, HEI, or subject area. If in the last-mentioned of these, the scheme could be linked to one or more of the promising research pooling initiatives which could provide a mechanism for the effective engagement of technical mentors in broad subject areas such as engineering or life sciences.

Using our understanding of the success factors and our knowledge of the relevant Scottish scene we identified two possible rollout scenarios to test in Task 3. These were:

- Single university schemes hosted by other Scottish universities, much along the lines of the University of Edinburgh's EPIS;
- Multi-university schemes in which several universities in a city or region club together to run a scheme.

### **2.3 Task 3: Engage with stakeholders regarding the rollout 'strawman', testing and seeking support for the success factors**

The key stakeholders were the Scottish universities who would need to host or participate in a scheme. We held discussions with the majority of these universities to explore the possible relevance of an EPIS-type scheme to their KT and outreach activities. The interviews were semi-structured as we did not regard it as appropriate to impose a rigid questionnaire on the senior people we spoke to. The interviews covered philosophical issues such as whether they supported the broad thrust of EPIS, through to practical issues such as the feasibility of collaborating with other universities in city-wide schemes.

### **2.4 Task 4: Revise strawman rollout plan and review it in a workshop with SEEL and key influencers**

Following the consultations we revised the strawman rollout plans to suggest a roadmap of how the EPIS approach could be expanded across Scotland to achieve the best chances of success relative to the resources deployed.

We then convened two workshops at SE which were attended by all but one of Scotland's universities.

### **2.5 Task 5: Report to SEEL on the findings and recommendations of our work**

The final task was to incorporate the workshop results.

## 3 Task 1: Key Success Factors

This Section describes the results of Task 1, during which we sought to understand the reasons for the success of EPIS to date.

### 3.1 Interview Summaries

Consolidated summaries of the interviews appear below under subject headings.

#### The concept and basic design of the scheme

Different respondents picked up on different aspects of the scheme but it is best understood as having three elements:

- A straightforward way of making a university's facilities and expertise available to an entrepreneur with a specific business idea. Though not totally unique, there are few equivalents in the UK. Unlike most "mainstream" commercialisation schemes attached to universities, the idea and entrepreneurial flair are not assumed to originate within the university
- Office accommodation, which is currently provided in university departments themselves rather than in specialised incubator facilities (in accordance with the fact that EPIS is a **pre**-incubator scheme, of course).
- A highly supportive incubation process including a grant/loan, mentoring, a mutual support network, tutoring (currently centred on the EPIS office and contacts network)

The objective of the scheme is very simple: to create a viable business within a short timescale.

The scheme is characterised by its simplicity and lack of bureaucracy:

- Avoiding a 'one size fits all' mentality
- Simple criteria and process for getting on
- Simple in terms of rules, regulations
- Simple IP arrangements
- Light touch administrative style.

The scheme attracts a small group of participants from across the world. It manages to engender a high level of commitment and enthusiasm from all concerned. This is partly due to the enthusiasm of the current Programme Manager Adrian Smith, and partly due to the participants being relatively select and 'elite'.

#### The way in which the scheme is led and administered by the EPIS team

EPIS is led by Adrian Smith and Linda Brooks. Adrian is from an entrepreneurial business and finance background, and has a good network of business people across Scotland. Linda has a background and extensive network within the University.

These networks are not databases. Put somewhat colloquially, both Adrian and Linda can ask for favours – and presumably give favours in return. What comes across is that the personal reputations and backgrounds of the two individuals are vitally important to being able to make the scheme work.

Many respondents commented that the scheme is led with passion and enthusiasm, implying a very different attitude to the conventional 'civil servant' administrative approach often encountered in other schemes designed to promote business creation.

#### The mentors

The mentors are unpaid but are enthusiastic. They find their involvement worthwhile. Again, the high quality of the mentoring activity is largely the result of the EPIS team's network and reputation.



### The academic department

The University is committed to EPIS as part of the commercialisation agenda. At the departmental level there is a varying level of commitment. There is a diversity of experiences, and the balance of facilities versus expertise varies across projects.

### The quality of the ideas/projects/entrepreneurs coming into the scheme

The scheme attracts people from across the world. The selection process is akin to venture capital: the entrepreneur must be able to sell the concept and themselves to Adrian and the selection panel. Respondents did not give the impression that there is a large unmet demand for EPIS placements.

### The local context

Two things came through. First, the commitment of the university. One must bear in mind that the scheme is not a net money earner for the university. It is true that the university receives a “bench fee” of £5k for each entrepreneur it hosts, but the value of the university’s contributions in kind has been estimated (by the university) to be (on average) almost £15k per entrepreneur. So there must be enough slack in the system that the university can afford to offer its resources almost for free.

Second, the local business community. The majority view was that there is nothing special about Edinburgh that makes EPIS work there. A minority view is that Edinburgh has a particular business mentality (like the “City”) that is conducive to getting mentors on board.

## 3.2 EPIS success factors

The success factors expressed and implied in the interviews are summarised below.

- 1 Committed university with enough financial slack to support the scheme at departmental level. While the university may gain brownie points (KT metrics etc) for running an EPIS scheme, at departmental level the financial benefit is just the bench fee. This is likely to be lower than the opportunity cost in some cases; the difference is part of the university’s contribution in kind. With the contribution in kind being borne at departmental level, other university’s departments would probably be dissuaded from becoming involved.
- 2 Willingness to let the entrepreneur hold all IP with the university having no rights to it. The EPIS IP arrangements are simple but unusual. The entrepreneur owns the IP and the university has no claims to it. This contrasts with the more usual situation where a university is effectively nurturing a new business arising from the research activities of its own staff and/or students. However it is one of the simplifying factors that has helped make EPIS work.
- 3 Enthusiastic local team with passion for the scheme, access to business mentors, and relationships within university. The EPIS team of Adrian Smith and Linda Brooks were widely applauded for their enthusiasm and their networks of contacts. The current EPIS scheme is highly influenced by these individuals. For the scheme to be expanded, other similar people would probably be needed in other universities.
- 4 Small, select cohort of entrepreneurs with business ideas and a need for university resources. While there is certainly competition for places on EPIS the relatively small size of the scheme is one of the success factors. The entrepreneurs - and to some extent the mentors – feel a high level of commitment to the scheme and fellow participants. A larger cohort would probably not get the same level of commitment from participants.
- 5 Simplicity.
- 6 Above critical mass. The Edinburgh scheme has an inherent ‘critical mass’. The EPIS office has two staff, the overhead costs of whom have to be spread across the entrepreneurs. With fewer entrepreneurs, the overheads of the scheme could become excessive. The design of the scheme as a small mutually supportive cohort of entrepreneurs meeting once a week for tutorial

sessions also sets a minimum size. Accordingly, though there is no absolute critical mass we would expect any other schemes to need to be of a similar size to Edinburgh's.

## 4 Task 2: Rollout Options

This Section describes the results of Task 2, namely the formulation of a number of “straw man” models for the potential rollout of an EPIS-like scheme or schemes across Scotland. Four types of rollout are elaborated here:

- Integrated, single university schemes – essentially Edinburgh’s EPIS replicated in other universities;
- Multi-university schemes – where all universities in a city or metropolitan region collaborate to provide a scheme, thereby making it easier to achieve critical mass;
- Departmental schemes – pan-Scotland schemes in which individual departments opt in to deliver pre-incubation for specific subject areas;
- Non-university-led schemes – where for example a city authority or entity within SE is the focal point and organiser of the scheme.

### 4.1 Integrated, single university schemes

The existing EPIS scheme is integrated in a single university. If this feature were preserved in a rollout, the scheme could be replicated in other universities willing to host such a scheme. The principal candidates are Glasgow, Strathclyde, Aberdeen, St Andrews and Dundee.

There are basically two options for doing this, depending on how closely the new schemes follow the EPIS model:

- 1 Franchised schemes in other universities which would be replicated, inspired and supervised by EPIS team and use the EPIS brand;
- 2 Autonomous schemes in other universities, only loosely based on EPIS, rather as EPIS was loosely based on a scheme in the University of Twente.

Neither of these options is without challenges. In the first case we can see a risk of universities not giving sufficient commitment and support while their hands are tied by it being a ‘franchise’ and the fact that the scheme would be seen to be associated with another university. In the second case, there is more likelihood of commitment but each autonomous scheme would need to achieve or exceed a critical mass to be viable. Finding suitable leaders to create and lead these schemes will be a pre-requisite, and will be moderately difficult. Both options would lead to universities competing with each other for applicants. This is not necessarily a problem, but there may be a need to manage or limit competition.

### 4.2 Multi-university schemes

The universities in a city could club together to run an EPIS scheme. This would help mitigate the critical mass issue because the scheme as a whole would need critical mass, not each university.

Our assumption here is that the marketing, enrolment and incubation aspects would be consolidated across the universities but the host academic department could be from any of the participating institutions.

There are several natural clusters of universities in Scotland which could be envisaged for EPIS-type collaborations:

- **Edinburgh:** University of Edinburgh, Heriot Watt, Napier, QMUC;
- **Glasgow:** Glasgow University, Strathclyde, Caledonian, UWS
- **Greater Dundee:** Dundee, St Andrews and Abertay
- **Aberdeen:** Aberdeen and Robert Gordon

In these arrangements one university could take the lead with the others as satellites, or alternatively all could be equal partners.

### 4.3 Departmental schemes

The idea here is that departments, rather than whole universities, would opt into the scheme. This could open the way for industry sector, or academic subject schemes. University departments would provide the facilities and expertise appropriate to individual entrepreneurs. The critical mass in marketing and recruitment would be achieved across the whole of Scotland. Organising the pre-incubation process (eg tutorials) may be more difficult. A Scotland-wide pre-incubation process would be logistically almost impossible, but the scheme could piggy-back on existing facilities and infrastructures. The scheme may be viable but would surely lose the focus and commitment that has made EPIS successful so far.

The various research pooling arrangements in Scotland are indicative of the potential for departments to work together across different universities. However, part of the success of the existing EPIS scheme arises from its essentially “local” character, and it is difficult to see how to retain this advantage if the scheme were to be dispersed across several widely-separated departments.

### 4.4 Non-university-led schemes

A scheme could be led by SE (either nationally or at the level of the regional offices), city authorities or other agencies. In such an arrangement the universities would provide facilities and expertise, but the marketing, recruitment and pre-incubation process would be provided by the lead agency.

There is no reason in principle why such schemes could not be constructed from locally available building blocks. However, it would be more difficult to replicate the commitment that is seen as one of the key success factors of EPIS.

## 4.5 Initial evaluation of rollout options

The table below gives our informal scoring of the alternative rollout options.

| <i>Points out of five</i>                | <b>Univ<br/>commitment</b> | <b>IP<br/>arrangements</b> | <b>Enthusiastic<br/>team</b> | <b>Small<br/>cohort</b> | <b>Simple</b> | <b>Above critical<br/>mass</b> | <b>Total<br/>points</b> |
|--|----------------------------|----------------------------|------------------------------|-------------------------|---------------|--------------------------------|-------------------------|
| Franchised schemes in other universities | ****                       | *****                      | ***                          | *****                   | ***           | ****                           | 24                      |
| Autonomous schemes in other universities | *****                      | ****                       | ****                         | *****                   | ****          | ***                            | 25                      |
| Multi-university schemes                 | ***                        | ***                        | ***                          | ***                     | ***           | *****                          | 20                      |
| Departmental schemes                     | **                         | **                         | ***                          | ****                    | **            | **                             | 15                      |
| Non-university-led schemes               | *                          | ***                        | **                           | ***                     | **            | ***                            | 14                      |

The first two options are closest to the existing successful EPIS scheme and represent a proven model. The need to achieve critical mass could represent a challenge in the case of autonomous schemes in other universities.

The multi-university option also scores highly and it could avoid some of the critical mass issues.

The final two options involve weakening the close-knit integrated EPIS model and adding complexity. Achieving commitment from participating universities is likely to be significantly more difficult. A national scheme is more likely to become bureaucratic and lack the enthusiasm that has characterised EPIS.

## 5 Task 3: Consultations with Stakeholders

This Section describes the results of Task 3, in which we consulted relevant stakeholders in a number of Scottish universities in order to verify our perceptions of the key success factors for EPIS, and to discuss the roll-out options discussed in Section 4 above.

### 5.1 Interview Programme

The interview programme concentrated on two possible ways of extending EPIS:

#### Integrated, single university schemes

We explored the possibility of other major universities acting as the host for an EPIS-type scheme in the way that the University of Edinburgh does. We took the view that other universities would need to be large enough to give the scheme sufficient critical mass. The candidates we chose were Glasgow, Strathclyde, St Andrews, Dundee, Aberdeen and Stirling.

#### Multi-university schemes

We looked specifically at an extension of the existing EPIS scheme in Edinburgh. It would still be based at the University of Edinburgh as the lead institution but other universities in the Edinburgh locale would be invited to join. The universities we interviewed were St Andrews, Napier and Heriot Watt.

The interviews were conducted mainly face-to-face during February 2008. We aimed to interview the most senior person we could with responsibility for enterprise and commercialisation. The interviews were semi-structured to include such issues as:

- Is an EPIS-type scheme attractive and how would it fit with other commercialisation activities?
- How similar would it be to EPIS; how autonomous would it need to be to get commitment?
- Would there be sufficient demand?
- Possibilities for collaboration with other universities
- Size and specialisms?
- Pros and cons of a pan-Scotland scheme?

### 5.2 Findings

#### 5.2.1 EPIS is a relevant and attractive scheme

All interviewees were aware of EPIS but not all knew very much about the scheme. Once we explained EPIS we found a positive response. In particular, it became apparent that EPIS goes with the grain of most Scottish university commercialisation policies and practices at the moment. University commercialisation has moved on from being concentrated on staff spinouts. So EPIS is seen as an open scheme:

- Encouraging spin-ins, not just spin-outs
- Being relevant to undergraduates, not just staff

- Promoting an entrepreneurial culture
- Targeting SMEs
- Connecting with local mentors and sources of finance.

Some interviewees were impressed by the ability of the scheme to contribute very positively to the KT metrics by which all UK universities are judged by the relevant funding bodies. This is because the scheme enables start-up companies to be created, and ascribed to the host university for KT assessment purposes, in a way which is not limited by the host university's indigenous IP.

### 5.2.2 Other universities would be interested in hosting a scheme

We found serious interest from Strathclyde, Dundee and Stirling. Aberdeen was supportive of the scheme but did not think there would be enough demand for a "generalist" scheme such as EPIS in their region<sup>1</sup>.

- All these universities shared the same philosophy towards business creation, agreeing that this is an appropriate role for a university.
- Strathclyde, Dundee and Stirling had most of the components of an EPIS-type scheme in place:
  - a way of funding departments to help SMEs
  - incubator space
  - a mentor network – local mentors, alumni or professional commercialisation / entrepreneurship advisors
  - a technology transfer/commercialisation unit
  - various grant schemes
  - entrepreneurship training.
- However, none had a coherent focused scheme exactly like EPIS, though Stirling has a scheme aimed only at undergraduate entrepreneurs.

### 5.2.3 The smaller Edinburgh-based universities would collaborate in principle

We explored an Edinburgh extended scheme with Heriot Watt and Napier:

- Both Heriot Watt and Napier were enthusiastic to get involved with EPIS.
- Heriot Watt believes it has academically complementary strengths to Edinburgh.

### 5.2.4 Other clusters of universities were found

In the course of the interviews we found that:

- Dundee thought they could involve Abertay

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<sup>1</sup> Aberdeen is something of a special case when it comes to new business creation, in that there is already excellent support and private sector funding available for new ventures in the energy sector, which is much the most prolific area for new business creation in and around Aberdeen.

- St Andrews looked to Dundee as a possible lead partner.

Glasgow and Strathclyde would not be good candidates for collaboration as they have markedly different approaches to commercialisation.

We conclude that there is scope for collaboration in close university clusters. In practice most such collaborations would be between universities of unequal size. We found broad support for having a single lead university with the other(s) having an agreement – possibly informal - in terms of numbers of entrepreneurs being placed there.

### 5.2.5 Demand

The level of demand for any expanded scheme is an important consideration. In our interviews we found that because universities had not targeted external entrepreneurs before, they had little feel for the likely demand.

The best starting point is the current EPIS scheme. According to Adrian Smith:

- EPIS has not been oversubscribed in the past but is currently receiving a quadrupling of applications
- Around half the recruits already have some connection to the University of Edinburgh and around a half have come in response to advertising or agencies such as 'Connect'.

It may be inferred that each additional university in the scheme will attract some 'new' recruits with connections to that university who would not otherwise have heard of the scheme. However some of the people like those who enrolled on EPIS in response to advertising might be attracted to the additional university. This implies that demand will not simply expand with supply. If an EPIS-type scheme were rolled out across Scotland, it would have greater visibility and would thereby tend to increase demand.

The scheme could feasibly target not just entrepreneurs from outside the university but also undergraduates, postgraduates and staff, thereby expanding its 'catchment area'. In making this suggestion we are aware that there are generally other and more mainstream processes by which universities support the commercialisation of applied research. Most universities seek to retain at least part-ownership of the background IP upon which new ventures are based, and so there could be a tension between this situation and the one whereby the host university for an EPIS-like scheme does not seek to take ownership of any IP. This tension would need to be addressed during the formulation of any new or extended EPIS-like scheme(s).

On balance we think that a moderate expansion of the scheme would lead to a corresponding moderate expansion in numbers. But the basic proposition – that of a startup business requiring access to university expertise and facilities - remains a somewhat unusual circumstance.



## 6 Task 4: Rollout Strategy Workshops

### 6.1 Participants

All but one Scottish university (Abertay) attended a workshop. The person invited from Abertay kindly submitted his comments by email.

#### 9 May 2008

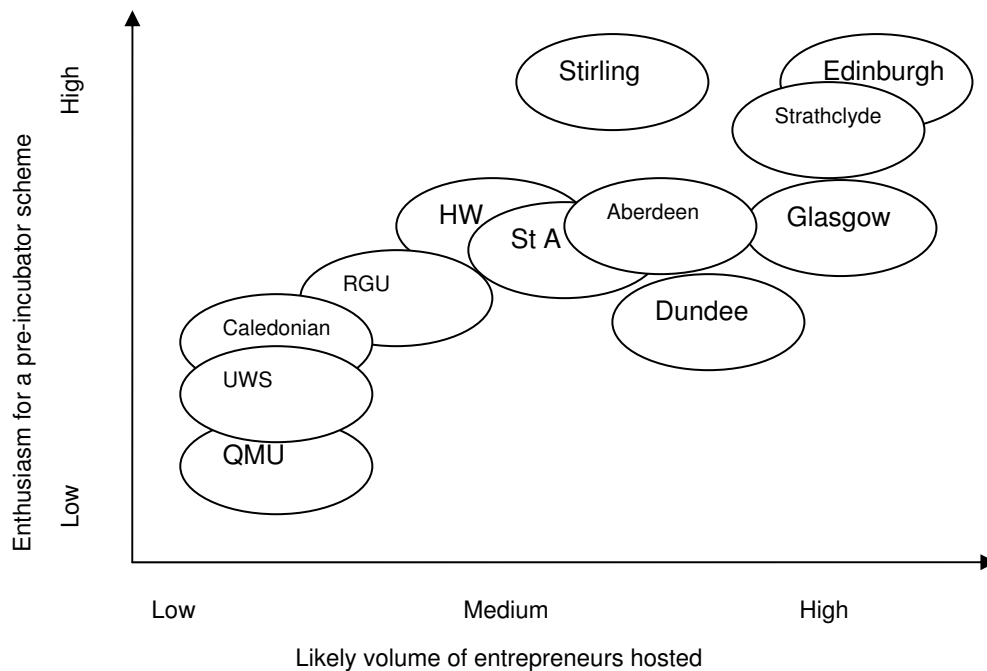
|                           |
|---------------------------|
| University of St Andrews  |
| Heriot-Watt University    |
| University of Glasgow     |
| University of Stirling    |
| University of Dundee      |
| Queen Margaret University |
| Napier University         |
| University of Edinburgh   |

#### 23 May 2008

|                        |
|------------------------|
| University of Aberdeen |
| Glasgow Caledonian     |
| RGU                    |
| Strathclyde            |
| UWS                    |

### 6.2 Level of interest versus size of scheme

The workshops covered many issues. Broadly universities varied in both their enthusiasm for the scheme and in their capacity to host a scheme, bearing in mind the critical mass issues discussed earlier. The plot on the next page shows all participating universities plotted against these two factors.



Source: Subjective judgement from comments made in the workshops

We found generally that the appeal of EPIS varied with size, with strongest appeal among the large universities such as Edinburgh, Strathclyde and Glasgow, and lowest appeal among the smaller universities. However, some universities had particular reasons why they were strongly for, or neutral towards, this type of scheme. For example, Stirling has embarked on an undergraduate entrepreneurship programme and sees EPIS as a natural adjunct. By contrast, Glasgow has concentrated on building relationships with large corporates so its focus has not been on the groups that EPIS tries to reach.

The likely volume of entrepreneurs that could be hosted also varies with size.

- High volume would be expected in large universities such as Glasgow.
- Medium volume would be expected in medium size universities. In these cases there would not normally be enough demand for a self-contained scheme. Some would want the ability to “dip their toes in the water at low cost”, and to make use of the expertise that has been built up at EPIS. There was generally a desire to piggy-back on bigger schemes where possible.
- Low-volume would be expected in small universities and those with less of a track record in entrepreneurship. Here, there would be little point in setting up a ‘scheme’ but there was some interest in hosting entrepreneurs on an ad hoc basis – probably in conjunction with an established scheme elsewhere.

Throughout the interviews and workshops, people commented that the scheme may struggle to get support from university departments. This was because the £5k 'bench fee' was considered lower than the opportunity cost. In the smaller and poorer universities it was felt that departments would get a better return by using staff and facilities in other ways. It was suggested that, if the funding were insufficient, then maybe the sum could be increased.

### 6.3 Rollout models

The larger or more prestigious universities were clear that, if there were to be an EPIS-type scheme for them, it would have to be **their** scheme. It would need to be run independently from Edinburgh and would need to be branded and promoted to give their university a competitive edge.

The smaller universities were happy to be part of any arrangement that gave them ad hoc access to EPIS entrepreneurs, but could not justify their own scheme.

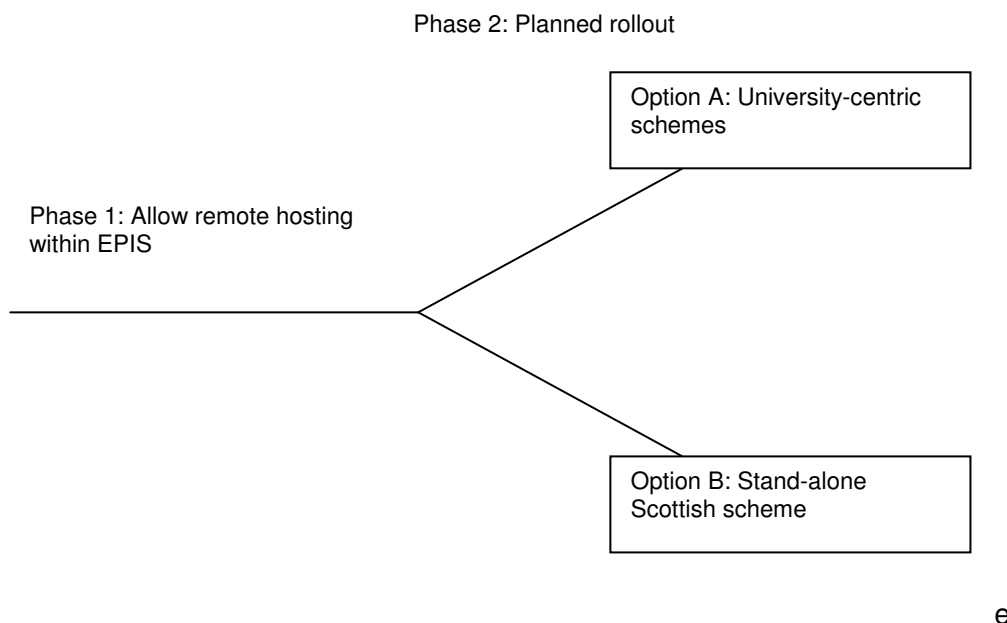
There was discussion in the workshops of making it possible for EPIS to have entrepreneurs hosted at other universities while maintaining the entrepreneurial component at Edinburgh.

Following the workshops there was further discussion of the possibility of a pan-Scotland scheme to enable the ad hoc access that had come through in the workshops as something that universities want.

## 7 Task 5: Recommendations

### 7.1 Roadmap

While EPIS has been a successful scheme it is not straightforward to find a way of expanding it without undermining the factors that have made it successful so far. Drawing together our findings we suggest that the roadmap going forward should be as shown below.



Phase 1 is straightforward. EPIS has had entrepreneurs apply who cannot be hosted in Edinburgh University. Optoelectronics is an example of a field where Edinburgh has no expertise. These entrepreneurs could have been hosted at other universities (Strathclyde and St Andrews are both strong in optoelectronics). Until now there has not been a mechanism for doing this. EPIS could be encouraged and enabled to host entrepreneurs elsewhere, while maintaining the entrepreneurial component at Edinburgh. Demand for this mechanism was voiced at the workshops. We believe that the scheme could expand by an extra 50% in this way.

Subsequently, Phase 2 has two basic options. Option A is to essentially replicate EPIS in a very small number of other universities (or clusters of universities). Option B is to create a stand-alone Scottish scheme. Both options are described below.

#### Option A: University-centric scheme

- Invite universities to apply for funds to run an EPIS-type scheme. Ideally, encourage consortia of main plus satellite universities (eg Dundee with St Andrews) to apply.
- Self-contained schemes with critical mass can be set up where a minimum of – say – 12 entrepreneurs per year are expected. This is sufficient to justify the creation of a secretariat.
- Where this critical mass cannot be envisaged, an ‘add-on’ scheme should be possible. This would allow the scheme to share costs and services with existing commercialisation

infrastructure. Without the full cost of a secretariat, the numbers going through the scheme can be lower. Note that the distinction between the two types of scheme need not be made visible in marketing the schemes.

- Schemes should be modelled on EPIS but with variations allowed. These could include:
  - Providing accommodation in an incubator unit rather than departments. In this situation the secretariat might also be based in the incubator.
  - Using a business school to provide the entrepreneurship training. Such modules have already been developed by Glasgow Caledonian and Strathclyde Universities for the RSE/SE Enterprise Fellowships – these could possibly be re-used.
  - Using alumni as mentors.

In looking at variations it is important to recognise that Edinburgh has created a successful scheme and will have views about what works and what does not. Nevertheless, other universities will undoubtedly want to customise their schemes in the way that Edinburgh customised Twente's.

- However, we suggest that all schemes should offer participants the same headline terms:
  - Same size loan
  - Same length of programme
  - Same IP arrangements.
- Schemes should aim for 50% recruitment from local catchment area – the university, its alumni, the region, and 50% outside.
- The main difficulty in running any individual scheme will be recruiting a scheme leader to perform the 'Adrian Smith' role, and an administrator with excellent contacts into the host university. The roles are not identical to that of university commercialisation/technology transfer officers.

### **Option B: Stand-alone Scottish scheme**

A stand-alone, pan Scotland scheme would separate-out the entrepreneurial component and the hosting component.

- The entrepreneurial component should be run as closely to the EPIS model as possible. There could be two, or perhaps three, centres but no more. Entrepreneurs would be required to come to weekly meetings, just as they are in EPIS.
- The hosting component can in principle be distributed among all universities in Scotland. In practice, however, there would need to be someone in a Linda Brooks role in each of the participating universities. There is also a certain amount of learning and experience involved. In practice it is therefore likely that the scheme would expand incrementally, starting off with the larger or most enthusiastic universities.

A stand-alone scheme would have to have enough autonomy to act entrepreneurially, as EPIS has done so far.

The pros and cons are listed in the table.

|  | Pros  | Cons   |
|--|---|--|
| <b>Option A:<br/>University-<br/>centric schemes</b>     | <ul style="list-style-type: none"> <li>• Proven model</li> <li>• Bidding process likely to generate commitment from host universities</li> <li>• Diversity of approaches</li> </ul>                                     | <ul style="list-style-type: none"> <li>• Smaller universities probably disenfranchised - Not universal</li> <li>• May be difficult to recruit several leadership teams</li> <li>• Potential competition between schemes</li> </ul>   |
| <b>Option B:<br/>Stand-alone<br/>Scottish<br/>scheme</b> | <ul style="list-style-type: none"> <li>• Universal access</li> <li>• Potentially able to place entrepreneurs in the best place for their field</li> <li>• Less dependent on recruiting many leadership teams</li> </ul> | <ul style="list-style-type: none"> <li>• Not proven</li> <li>• Difficult to get university commitment</li> <li>• May need increased bench fees for the less well-off universities</li> <li>• Difficult to get the passion, intensity and cachet in a dispersed scheme</li> <li>• Prone to bureaucracy</li> </ul> |

These two options are extremes. It might be possible to create possibilities between these – such as a stand-alone scheme for the East of Scotland.

Our recommendation on Phase 2 is to first seek to deploy Option B, but only on two conditions.

- Firstly, only if a leader can be found who would be capable of building on EPIS and making it work at a national level. Unless such a leader can be found there would be a strong risk that Option B would become bureaucratic and devoid of the enthusiasm that has made EPIS so successful. It would be a national scheme, but without the dynamism of EPIS.
- Secondly, only if the scheme can be set up to have enough autonomy to act entrepreneurially. This suggests that it should be set up as a company rather than being a department of SE, or an inter-university collaboration.

These conditions are related. The sort of person who would be an entrepreneurial leader would only accept the job if they were given the autonomy to be entrepreneurial.

If these two conditions cannot be met, then Option A should be pursued. The proposed bidding process should generate the necessary commitment, and the university-centric approach is proven. The scheme would not be universal, but this may not be a problem given that Scottish universities have not hitherto been clamouring for their own EPIS schemes.

## 7.2 Resources

The resources for an expanded EPIS scheme can be estimated from the level of expansion predicted. In the first phase we believe that the scheme could be expanded to around 150% of its current size while retaining its essential Edinburgh character and current modus operandi. In the second phase it could be expanded to between 200% and 300% of its current size. Beyond that, it is difficult to believe that the quality of applicants and the prestige of the scheme would not suffer.

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