



PRO INNO EUROPE

**INNO
LEARNING PLATFORM**

**Good practice Identification –
Advice for transferability
United States –
Innovation in Services
i2E**

February 2008



**PRO INNO
EUROPE**

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CHAPTER I: Good practice identification

1 General description of the good practice

In the U.S. the focus of innovation programs/policies tends to be on stimulation and support of technology start-ups of all types, including services, often in specific clusters or disciplines in nanotechnology, life sciences, software/IT, etc. Many state and a few federal innovation programs/initiatives encompass services but do not single out services as their only or primary focus. State programs provide funding and services to software development and other service sector start-ups as they do other types of technology-related start-ups. In the case of i2E, a state-wide program in Oklahoma, it is designed to help new innovation firms get started and about one-third to one-half of these are service firms including health care services, software and information technology. The program is generally considered successful, which is even more significant because the program operates in a state with few indigenous technology resources. Moreover, the program has been successfully adapted to the United Kingdom by the Southeast England Economic Development Agency.

The i2E organization provides risk capital and services to help form innovation start-ups. i2E is an “umbrella organization” that operates commercialization and early-stage capital programs:

- **Oklahoma Technology Commercialization Center** – The OTCC works with Oklahoma companies, inventors, researchers, and entrepreneurs to turn technological innovations into business opportunities. Start-ups assisted by OTCC have secured more than \$260 million (€384.8 million)* in capital.
- **Technology Business Finance Program** – This program is funded by the state legislature to specifically address early-stage capital needs of technology-based businesses. By 2007, eighty-two awards totalling more than \$8.8 million (€13.0 million)* have been made to 73 companies.
- **Oklahoma Seed Capital Fund** – Created in 2007, OSCF is a \$7 million (€10.4 million)* venture capital fund that provides seed and start-up stage equity financing to small, technology-based Oklahoma companies. OSCF looks and operates like a conventional venture fund with the specific goal of furthering economic activity and success in the state by bridging the early stage funding gap between personal sources and traditional sources of venture capital.
- **Enterprise Oklahoma Venture Fund** – EOVF is managed to meet investment criteria established by investors to maximize the fund's opportunity for success and return on investment within state legislative guidelines. The criteria include evaluations of technology and product validation, market validation, and business plan validation, including the overall investment opportunity and financial risk and return-on-investment. EOVF seeks investment opportunities in qualified enterprises that have high growth and high profitability potential.
- **W. Reynolds Governor's Cup** – the Governor's Cup is a business plan competition designed to encourage students of Oklahoma universities and colleges to develop their ideas into businesses.

One of the aspects that sets i2E apart from similar state programs is that they provide very extensive services involving business development, helping the firm get started and evolve and develop business opportunities. I2E selects and works with businesses in a phased approach that “rises the cream” of businesses to the top, and I2E works most intensively with these businesses that they call their “portfolio” businesses. These businesses get access to i2E's direct investments and investor network. Since 1998, about 300 firms have become “portfolio” firms and have successfully completed a staged access to capital.

Through the program's commercialization services, they "pro-actively" work with universities in the state to identify potential technology for transfer and commercialization. This includes service companies such as health services. As an example, one such company which secured \$3.6 million (€3.3 million)* in venture capital. In this case, the Oklahoma Seed Capital Fund, co-invested with a fund financed by a state-funded program from another state (Missouri-based Prolog Ventures) and was joined by a group of public-private investors through the Oklahoma Equity Partners.

I2E has developed an extensive suite of business and commercialization development tools and provide extensive personal assistance that takes the early-stage business through a staged process of business development and readiness for investments. These stages are: (1) investigation, (2) feasibility, (3) development, and (4) introduction. For example, in the first stage i2E staff will help the firm develop a risk profile, market assessment (identify pricing structures, market barriers, etc.), product/service assessment (survey state-of-the art, identify critical barriers, evaluate applicability, etc.), and business assessment (estimate profit potential, identify capital needs, etc.). In the second stage, they help the business conduct a market study (identifying and quantifying market size and customers, etc.), formulating financial assumptions, identifying potential seed capital, forming an advisory team, etc. In the third stage, they help the business define target markets, conducts tests on the product, process or service, identify a management team, design/develop the organizational structure, finalize intellectual property issues (if any), etc. In the fourth stage, i2E staff helps the company survey customers, establish market relationships, hire staff, establish business functions, and secure first-stage financing. This is where i2E may itself invest in the company and/or introduce them to private investors.

When i2E invests in start-ups, they act as strategic partners in the business, often sitting on the board. The majority of the businesses that i2E assists are very early stage (pre-revenue) start-ups. The Director of i2E, Thomas Walker, said that it was not unusual to work with a company for twelve months, perhaps as much as eight hours per week for the first month and then a few hours each week thereafter. In some cases, i2E will bring in or refer the start-up firms to special consultants, attorneys, etc. The Director of i2E said that the most important aspect of their successful assistance is that they have hired staff that has solid business management backgrounds, often having themselves started a business or working in start-ups. (This is consistent with other similar state programs that we have worked with or examined.) Their staff must have direct business experience.

The Chief Operating Officer of I2E said that there are differences in I2E's work with start-up service firms. Service firms tend to require less capital and infrastructure, but often require more attention regarding "finding the right people" to hire and sometimes have more complex management issues. I2E has found that the most important factors in helping service firms, as other firms, is having available people that understand business development and can give them a realistic understanding of their customer market, knowledge of capital markets, and how to attract investment capital.

The state of Oklahoma provides about \$3 million per year (€4.4 million)* for the operations of these programs and additionally provided a one-time \$4 million (€5.9 million)* investment for the Enterprise Oklahoma Venture Fund.

2 Please describe the selected good practice¹ in terms of:

2.1 Uniqueness:

Measure Name:		I2E	
General description/rationale:			
I2E provides commercialization, business development and seed capital investment services to startup and early-stage SMEs.			
Innovative characteristics as regards:			
Methodology	Organization	Function	Results
<p>I2E's mission is to create wealth for the citizens of Oklahoma and enhance the state's image as an attractive, successful venue to start and grow businesses based on innovation and advanced technology.</p> <p>I2E was specifically developed to work with companies, inventors, researchers and entrepreneurs to turn technological innovations into exceptional business opportunities for Oklahoma and expand the state's technology base.</p> <p>I2E's seed and early stage funds were created to meet the goal of furthering economic activity and success in the state by bridging the early stage funding gap between personal sources and traditional sources of venture capital.</p> <p>The Oklahoma statutes creating the seed</p>	<p>I2E is a private, not-for-profit corporation funded by the State of Oklahoma. It was created in 1997 in response to the Oklahoma Center for the Advancement of Science and Technology (OCAST), a state agency, initiative to establish a vehicle to support technology commercialization. Individual programs operated by i2E are structured and funded somewhat differently.</p> <p>The Oklahoma Technology Commercialization Center is operated by i2E under contract with the Oklahoma Center for the Advancement of Science and Technology (OCAST), and is funded with state appropriations.</p> <p>The Oklahoma Seed Capital Fund is an usual public-private partnership operated under the state's</p>	<p>I2E works with different levels of companies. It interviews and selects companies that become clients, and then working with them through a staged process, selects "portfolio companies" (i2E's crème de la crème) that it then provides more intensive services and investments.</p> <p>I2E suite of services involves various tools and direct personal assistance in the following areas:</p> <p><u>Enterprise Services:</u></p> <ul style="list-style-type: none"> • Business Risk Assessment • Commercialization Roadmap • Quickview Analysis • Business Plan Preparation • Business Pitch Strategies <p><u>Innovation Services:</u></p> <ul style="list-style-type: none"> • Technology Review and Assessment • Technology Roadmap <p><u>Commercialization Services:</u></p> <ul style="list-style-type: none"> • Business Model Evaluation • Valuation Consideration • Grant Writer Services • Access to Capital <p><u>Investments:</u></p> <p>I2E's suite of investment tools include seed and early-stage, venture-capital type</p>	<p>Since 1998, I2E's Oklahoma Technology Commercialization Center has assisted more than 1,200 companies, of which half became project "clients." Of those 600 clients, 290 successfully completed i2E's staged access to capital process and over 85 of those companies have acquired \$221 million (€27 million) in investment capital.</p> <p>FY 2006 impacts show that i2e's Technology Business Finance Program (TBFP) had invested in more than 60 companies, creating over 350 jobs and achieving a 24:1 ratio with private investments.</p>

¹A technique or methodology that has proven to reliably lead to the result that has been aimed for; An activity or procedure that has produced outstanding results in another situation and could be adapted to improve effectiveness, efficiency, ecology, and/or innovativeness in another situation.

<p>capital funding emphasized the necessity for such investments to have the high potential for positive impact on the Oklahoma economy through the creation of higher-than-average-wage jobs that will stay in the state:</p> <ul style="list-style-type: none"> • Investments were to be instrumental to the success of the company, be reasonably expected to assist in its retention within the state, and be reasonably expected to enhance employment opportunities within the state. • The investments must be used to develop, refine, and/or commercialize a product, process or innovation (which can include service innovations). • The company receiving seed capital investment must use commercially reasonable efforts to cause the product, process, service, or commercial application which results from the investment to be developed or produced by a state-based firm, or to apply such outcomes in a manner that has 	<p>Economic Development Act and is managed by a separate subsidiary of i2E called OSCF LLC. State funding is provided through OCAST. The Oklahoma Development Finance Authority and the Oklahoma Capital Investment Board are co-investors is OSCF LLC. In addition, OSCF seeks and accepts other private investments.</p> <p>The Technology Business Finance Corporation also is funded by state appropriations, and I2E is under contract with OCAST to administer the program.</p> <p>The Enterprise Oklahoma Venture Fund (EOVF) is a venture capital fund operating under state statutes and received a one-time infusion of \$4 million (€5.9 million)* from the state legislature to seed the original fund. Directors of the Fund serve three-year terms and may be re-elected.</p> <p>The programs operate with a budget of about \$3 million (€4.4 million)* per year, most of which is spent on direct awards to innovators. There are between 15-20 professional staff.</p>	<p>investments and loans.</p> <p>For seed investments (OK Seed Capital Fund): The level of private sector seed capital investment varies widely – in general from as low as \$250,000 to as much as \$750,000 or more. While this is the general range, each applicant is evaluated on a case-by-case basis to determine the optimum funding level. The Fund generally invests in the firm by taking an equity position (stock), or through debt, or both. The equity position is generally quite small.</p> <p>For early-stage investments (Technology Business Finance Program): I2E provides loans ranging up to \$100,000 (€ 148,000).* Eligible firms must leverage \$1 of other resources for every \$1 of financial assistance from the program. A minimum of \$1 of every \$1 in matching funds must be in cash. Paybacks are generally triggered by pre-negotiated and pre-determined events that mark major milestones in the companies' success, such as sales of products or services, licensing agreements, sales of patents, mergers or acquisitions or subsequent infusions of investment capital. The paybacks are then rolled back into the program for future awards.</p> <p>Other early-stage investments are done using a traditional venture capital model through I2E's Enterprise Oklahoma Venture Fund (EOVF). In this case as in the case of the seed capital investments, i2E takes position through equity (stock), or through debt, or both. This fund is managed to meet investment criteria established</p>	
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reasonable potential to create or enhance employment or other factors contributing to economic growth within the state.	I2E directors represent all parts of the State and all parts of the technology-based economy. They are primarily drawn from the private sector including entrepreneurs, investors, and the professionals who provide services to technology based companies.	by investors to maximize the fund's opportunity for success and return on investment within state legislative guidelines. The criteria includes evaluations of technology and product validation, market validation, and business plan validation, including the overall investment opportunity and financial risk and return-on-investments and internal-rate-of-return requirements.	
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2.2 Relevance:

Problem	Solution that was provided
Need for self-directed and personal business and commercialization assistance for innovators from experienced business managers, including organizational development, identification of customers, management, etc.	Design of a suite of business and commercialization tools. Staffing i2E with experience business managers, some with venture capital and investment experience, others with experience in managing start-ups.
Lack of early-stage capital available for innovators.	Development of Oklahoma Seed Capital Fund.
Lack of staged capital investments	Development of Technology Business Finance Program and Oklahoma Venture Fund
Need to lower risk of public investments.	Creation of state “fund-of-funds” through the Oklahoma Capital Investment Board to stimulate creation and attraction of private venture capital. (See full explanation under 2.5)

2.3 Effectiveness:

For effectiveness in quantitative respect see “results.” The most significant factor is how many firms have leveraged private capital and at what level – over 85 of i2E companies have acquired \$221 million (€327 million) in investment capital. Moreover, they accessed this venture capital in a state where there was virtually no venture capital one decade ago. Many of the recipients are service firms.

CEO’s of Oklahoma businesses attest to i2E’s valuable seed capital and business services that have helped them assess markets, leverage venture capital and expand services and products. The companies speak for themselves:

LifeGuard America: (Provides services, using advanced technology to significantly enhance the efficiency of the transplant logistics process: enabling physicians and clinicians access to improved information so they can make better decisions regarding the suitability of transplants for their patients faster.)

"We would not be where we are today without the OCAST TBFP funds. They came at exactly the right time when our struggling company needed it most. It gave us the ability to start saving the lives of those awaiting organ transplants in Oklahoma and across the country. i2E did with TBFP for us what others could not."

Veracity: (Ultra sonic inspection technology and services)

"i2E has played an integral role in assisting our company with strategic advice regarding our business plan development and raising capital. Their objective advice has helped us overcome some of the many hurdles that technology start-ups companies face."

Excel: (Facilities management and building automation control systems and services for multi-site commercial businesses. Value proposition is centered on productivity and operating efficiency improvements through automation, remote control and web accessible operating data.)

"Without OTCC's support around financial modeling and the candid discussions of Excel's strengths and weaknesses we would not have succeeded in raising \$5M in capital. Their assistance proved invaluable when developing ideas, strategies, business plans, and participation in meetings with venture capitalists."

Altheus Corp: (a start-up that provides novel medical therapies):

"i2E has been the backbone of early stage services, from Quick View to TBFPs to Seed Funding providing not only a path forward to the next level but also a frame of reference for the entrepreneurial and investment community on excellence in innovation. Without i2E we would not have been able to get to where we are today."

2.4 User satisfaction:

User group	Primary target group (yes/no)	Feedback provided	Explanation for feedback
Innovators and start-up enterprises in services, products and processes	Yes	92% satisfaction rate from the client satisfaction survey (response rate of 78% of total clients)	Clients find the direct personal assistance from experienced business staff very important and help in understanding the requirements and participating in meetings with investors/venture capitalists.

2.5 Recognition:

I2E won the 2006 Southern Growth Policies Innovator Award and is generally recognized as a very strong practice in the U.S. It is considered particularly significant by experts since Oklahoma has few technology resources (compared to California, New York, and other states). Its strong record of achievement (particularly in the amount of venture capital attracted to its start-ups) demonstrates its success.

2.6 Context dependency:

There are several important “infrastructure” factors that the state has built up over time, particularly state investments in research and development, and incentives/attraction of private venture capital. We discussed these two factors here.

An important factor in the success of i2E’s early-stage capital investments has been the ability to invest public funds side-by-side with private venture funds. In 1993, the state had only three private venture funds, and in order to address the lack of venture capital, the state legislature created the Oklahoma Capital Investment Board to raise capital through the sale of bonds, backed by state tax credits, that the Board invested in private funds – creating a state “fund of funds.” The Board receives no state appropriations, but manages a \$100 million (€148 million)* resource of private equity capital that it has invested in private venture funds, including the Oklahoma Equity Partners, mentioned above. Primarily because of this mechanism, the state now has 13 private venture funds, many of which invest side-by-side with i2E’s seed and early-stage funds. This is important because: (a) it lowers the risk of i2E’s investments, which are public investments; (b) it provides an additional check on the investment worthiness of the start-ups in which i2E is investing; and (c) it provides another valuable private sector resource to start-ups from experienced business experts regarding management, organizational, markets, staffing, etc.

As we have already described, many of i2E’s services are contracted by a state agency – the Oklahoma Center for the Advancement of Science and Technology (OCAST). In addition to the services programs by i2E, OCAST provides support for basic and applied research in the state’s universities and non-profit organizations. Since its inception in 1987 OCAST has invested a total of \$138.6 million (€205.1 million)* in Oklahoma research, development, technology commercialization and manufacturing modernization and, with this funding, has attracted nearly \$2.4 billion (€3.6 billion)* in private investments and federal funding. In 2006, OCAST was charged with the responsibility of administering a newly-created \$150 million (€222 million)* Economic Development Generating Excellence trust fund (EDGE Fund), created for the purpose of increasing private and public applied research and development, technology transfer and technology commercialization in Oklahoma. OCAST is governed by a board of directors with members from both the private and public sector. This base of state R&D support and the federal funding and private sector leverage has laid an important foundation for i2E’s commercialization and early-stage capital investments and services.

As with other programs of this type, the entrepreneurial nature and spirit of those involved in the start-ups, and the willingness to risk failure is always a factor in the success of innovation programs intended to stimulate start-ups. Moreover, the business experience and backgrounds of the professional staff is indispensable. Staff salaries are surprisingly minimal, but staff are committed to the process and “making a difference” by growing jobs in their state.

The state invests about \$3 million (€4.4 million)* per year and invested a one-time \$4 million (€5.9 million)* in the seed capital fund. The size of the investments are minimal for this type of activity.

Total award amounts (FY 06) [from OCAST Annual Impact Report]

Technology Commercialization Center	\$1.756 million (€2.598)* ²
Technology Business Finance Program	.961 million (€1.422)* ³

2.7 Replication:

The potential for replication to other environments is good given the following conditions:

² *Exchange rate used \$1 = €1.48

³ *Exchange rate used \$1 = €1.48

- 1) Phasing in of capital (rather than one major lump sum) will allow seed/venture funds and commercialization services to test various operational methods that are best for their own environment.
- 2) Seed capital funds must be staffed by experienced seed/venture capitalists and not government functionaries. Professional staff must come from the private sector and understand private sector markets.
- 3) There must be minimal government interference to allow the fund to operate as a private venture capital fund so that it does not get encumbered by numerous “social” requirements that hamper the fund’s operations.
- 4) Financial reporting requirements should be transparent and meet standard accounting and venture capital principals but should not be expected to meet additional government requirements.
- 5) Ideally, there should be some co-investment from private funds required in each deal. This lowers the public risk as well as help insures proper “vetting” of deals (and reduced the risk of government/political intervention in specific deals).
- 6) Commercialization professionals should have access to university research and technology transfer offices.

Regarding the later point, the i2E commercialization program (Oklahoma Technology Commercialization Center) works closely with the universities, and the universities provide a substantial deal flow to i2E’s seed and venture capital programs. Universities must be willing to work with professionals outside of the university and to give commercialization professionals full access to researchers. In environments where universities are not as accustomed to working with the private and non-profit sectors, there may be some additional preparatory steps that need to be taken in order to acquaint universities with the commercialization process and the value that brings them. It may be necessary to develop cooperative agreements that set the terms of working relationships, intellectual property, etc. between the program and the universities.

3 Additional information sources

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CHAPTER II: Advice for transferability

4 Introduction to the proposed action

4.1 What are the main actions to be promoted to meet the objective?

i2E is designed to provide seed capital and related services to support promising new enterprises in products, processes and services. About half of its clients are service enterprises. One of the aspects that sets i2E apart from similar state programs is that they provide very extensive services involving business development, helping the firm get started and evolve and develop business opportunities. i2E selects and works with businesses in a phased approach that “rises the cream” of businesses to the top and i2E works most intensively with these businesses that they call their “portfolio” businesses. These businesses get access to i2E’s direct investments and investor network and receive extensive business services in addition to risk capital. There are several investment tools including seed capital (small, very-early stage), loans and early-stage funds. These actions meet the objectives of supporting innovation service enterprises by providing the needed early-stage capital and business development to make the enterprises market-ready.

4.2 What is the general status of the recognition in the market of the necessity to invest in the proposed policy theme?

There is widespread recognition that there is a need for more venture capital and particularly early-stage capital and related business development services to support start-ups. Moreover, it is generally recognized that service-oriented start-ups may require more capital support than other types of enterprises. A recent report by EU INNO states “there are several reasons why innovation services might need support in accessing finance and these specially center around two issues: firstly, because many venture capital service firms are less tuned in to the need of service firms and secondly, because service firms are often more dependent on intangible, knowledge-based assets and valuations on these assets are often more difficult to make. This can create considerable barriers for Knowledge Intensive Business Service (KIBS) firms ...” (Fostering Innovation in Services, A Report of the Expert Group in Innovation in Services, 2007, pp. 26-27.)

4.3 How is the main policy theme communicated in the market/which guidance material is already available?

It has been fully recognized that service industries need to be fully harnessed to fulfil the intent of the Lisbon strategy. Several recent EU communications have highlighted the need for more support of innovation service enterprises. For example, the recent Communication “Putting Knowledge into Practice” highlighted the need for a more pro-active approach in to the creation and support of young innovative SMEs in the service sector (Commission of the European Union, 2006).

4.4 What is the expected outcome of the proposed actions?

If properly structured, the expected outcome is good. The i2E model has been adapted in the UK by the South East England Development Agency (SEEDA see seeda@seeda.co.uk) According to Greg Ward, the Director of SEEDA, they replicated and adapted i2E after having visited i2E in Tennessee and i2E provided some additional consulting services. They have had notable results from implementing the i2E model. SEEDA works with 300 portfolio companies per year, investing in them and assisting them with management, intellectual property advice, business planning, etc. The SEEDA results have not been quite as successful in terms of raising venture capital for SEEDA firms, which is

partly a function of operating in an environment with less venture capital, but SEEDA has raised about €4 million, quite substantial in the European market.

5 The innovation policy measure and its context

5.1 National and regional governance: please provide a description of the modalities of implementation of the proposed actions. Examples of elements to be taken into account are the role of the institute, the nature and characteristics of that institute that are important for a successful implementation of the good practice.

I2E operates as a private, not-for-profit organization. This gives it more flexibility and allows it to operate in way closer to a private venture capital firm than it would be able to if it were operating as a government program. I2E selects companies that become clients and works with them through a staged process; it provides its “portfolio companies” more intensive services and investments. I2E suite of services involves various tools and direct personal assistance in (a) enterprise services (building a commercialisation roadmap, business plan preparation, business risk assessment, etc.); (b) innovation services (technology assessment and building a technology roadmap); (c) commercialisation services (business model evaluation, access to capital); and (d) investments. I2E offers a suite of investment tools that include seed and early-stage, venture-capital type investments and loans. The Seed Capital Fund generally invests in the firm by taking an equity position (stock), or through debt, or both. The equity position is generally quite small. For early-stage investments (Technology Business Finance Program) i2E provides small loans that are matched by the enterprise. Other early-stage investments are done using a traditional venture capital model through I2E’s Enterprise Oklahoma Venture Fund (EOVF).

SEEDA UK adapted i2E’s basic model that focuses on making enterprises more ready for the private market. SEEDA, unlike i2E is a public agency. SEEDA built the program leveraging its incubator network and now operates the model from 21 different centers with a budget of about €4 million annually. Instead of providing some of the services in-house as i2E does, SEEDA procures many of its services provided to enterprise clients such as intellectual property advice, market research and business planning. SEEDA’s individual centers procure services and SEEDA has a hub for some of its services. SEEDA centrally writes the specifications and sits on the procurement panels to select, test and certify service providers for use at the different centers. (This differs from i2e which does operate different centers.) According to the SEEDA Director, this system has worked well and it has been important in making service delivery consistent across the various centers. Once the enterprises are accepted as a portfolio company they are provided services free on a limited basis. SEEDA’s Catalyst Fund was capitalized at about €1.4 million and the Fund provides loans (about 6 points above the base rate). SEEDA does not have its own venture capital fund as i2E. SEEDA’s successful implementation of the i2E model shows that the basic model can be successfully adapted and structured for other environments that take into account differing resources and organization. Flexibility in adapting this model as other models is one of the keys in successful replication.

5.2 National and regional economic structure of the region where the practice has been developed. We are looking for the main factors for success for implementing the suggested measure.

There are similar and dissimilar economic factors between Oklahoma, USA and European states. One factor is the availability of private venture capital – the U.S. generally has more venture capital than other parts of the world and this factor has somewhat contributed to the success of the i2E model. However, Oklahoma had very little venture capital (less than some areas in Europe) and intentionally increased the availability of local venture capital as a result of several actions that included

development a state “fund-of-funds”. This was an important factor in i2E’s ability to develop its own venture fund and lower the fund’s risk by investing side-by-side with private venture capital. In addition, the availability of experienced entrepreneurs in the U.S. provides a good base for service to start-ups. While experienced entrepreneurs also are more available in the U.S. than in most areas in Europe, SEEDA in the UK worked around this difference by using a network of certified service providers rather than in-house experienced entrepreneurs. While using experienced entrepreneurs is ideal, it appears that SEEDA’s network of service providers has worked well in the UK environment (and potentially in other EU states). I2E has also drawn heavily from its universities as a source of innovations that it turned into start-ups. European universities too provide an excellent opportunity base from which to draw potential innovations and related start-ups, given the proper methods and motivation.

5.3 The policy measure itself: what was it all about? Who were the actors involved, what actions have been undertaken and which result and impact has been achieved?

The state of Oklahoma created i2E to develop and manage a range of commercialisation and investment tools, including related business development services, aimed at stimulating and supporting new enterprises, including but not limited to service enterprises. These activities were created to develop new technology enterprises in order to promote “wealth creation” and jobs for the state. The non-profit organization operates independently and is staffed by experienced entrepreneurs and business people. The Oklahoma Technology Commercialisation Center conducts commercialisation services as part of i2E under contract with the Oklahoma Center for the Advancement of Science and Technology. The Center identifies promising innovations at the universities and builds enterprises based on the innovations. I2E’s investment tools support very early-stage (pre-formation) and early-stage enterprises that fill a gap in the traditional venture capital market (See 4.1 and 5.1) Since 1998, almost half of the i2e commercialisation “clients” successfully completed i2E’s staged access to capital process and over 85 of those companies acquired \$221 million (€327 million) in investment capital. FY 2006 impacts show that i2e’s Technology Business Finance Program (TBFP) had invested in more than 60 companies, creating over 350 jobs and achieving a 24:1 ratio with private investments.

6 The adaptability and transferability of the proposal

6.1 Why is it worthwhile to invest in the proposed action/tool? Did the feasibility study and good practice identification demonstrate substantial added value?

It is our opinion that a model similar to i2E would be a worthwhile investment in many European states. I2E is designed to:

- Meet investment capital needs of start-ups in areas with little venture capital.
- Fill early-stage investment gaps.
- Make start-ups more market-ready and investment worthy.

The good practice identification showed that the state’s investment in I2E has resulted in very substantial added value. I2E in combination with other state efforts designed to stimulate venture capital and commercialisation have had a positive impact on a state that once had few technology start-ups and venture capital.

6.2 If there is to be decided to invest in the proposed action/tool, what are the main factors to pay specific attention to?

The following factors are important in replication:

- 1) Phasing in of capital (rather than one major lump sum) allows seed/venture funds and commercialization services to test various operational methods that are best for their own environment.
- 2) Seed capital funds should be staffed by experienced seed/venture capitalists and not government functionaries. Professional staff must come from the private sector and understand private sector markets.
- 3) There must be minimal government interference to allow the fund to operate as a private venture capital fund so that it does not get encumbered by numerous “social” requirements that hamper the fund’s operations.
- 4) Financial reporting requirements should be transparent and meet standard accounting and venture capital principals but should not be expected to meet additional government requirements.
- 5) Ideally, there should be some co-investment from private funds required in each deal. This lowers the public risk as well as help insures proper “vetting” of deals (and reduced the risk of government/political intervention in specific deals).
- 6) Commercialization professionals should have access to university research and technology transfer offices.

The basic model can be implemented in many states. Poland, The Netherlands and Germany have already expressed interest to SEEDA about replicating the i2E model.

6.3 What is the expected impact of implementing the proposed action/tool?

Based on the fact that i2E has already been successfully adapted by SEEDA in the UK, we believe that the i2E model could add value if properly adapted to the specific environment and resources.

6.4 Based on the insights gained in the feasibility studies and good practice identification, what is the judgement/advice on the support that already has been created by stakeholders?

The state invests about \$3 million (€4.4 million) per year and invested a one-time, phased-in \$4 million (€5.9 million) in the seed and enterprise funds. In addition, the state funded an initial \$2 million (€3 million) for commercialization activities. According to the Director of i2E these levels are about right. The government funds SEEDA UK about €4 million per year for enterprise funds and related services (non-commercialization), substantially greater annual funding than i2E. The number of firms served by SEEDA UK is greater and unlike i2E, the funding is spread among 21 individual centers located throughout the region.

6.5 What is the advice on how to disseminate the action/tool?

We would have to conduct additional research to provide legitimate advice on how best to organize and disseminate the tool. We suggest a couple of flexible, pilot programs that would test and refine the model before disseminated it widely.