



PRO INNO EUROPE

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LEARNING PLATFORM

**Good practice Identification –  
Advice for transferability  
Innovation Awareness  
Knowledge Transfer Partnerships**

*February 2008*



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EUROPE

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# CHAPTER I: Good practice identification

## 1 General description of the good practice

**Knowledge Transfer Partnerships (KTP)** is a UK-wide programme to encourage business/knowledge base collaborations. Knowledge Transfer Partnerships was launched in 1975 (previously known until 2003 as the ‘Teaching Companies Scheme’ (TCS)).

Knowledge Transfer Partnerships helps businesses and organisations to improve their competitiveness and/or productivity through the use of the innovation, knowledge, technology and skills that reside within academic institutions, namely:

- Higher Education institutions
- Research Organisations
- Further Education Colleges

At the same time, Knowledge Transfer Partnerships also helps to increase the business relevance of knowledge base research and teaching. Funded by Government organisations led by the (then) Department of Trade and Industry (DTI), Knowledge Transfer Partnerships involve the forming of a partnership between a company (known as the company partner) and your academic institute (known as the knowledge base partner), enabling you to lead rewarding and ongoing collaborations with innovative businesses who require access to skills and expertise to help their company develop.

The Partnership also involves one or more recently qualified people (known as Knowledge Transfer Partnerships Associates) to facilitate this transfer of skills and expertise. An academic supervisor will provide academic supervision to the Associate who works within the company on a project of strategic importance.

Knowledge Transfer Partnerships helps academics:

- Apply their knowledge and expertise to important business problems
- Develop business-relevant teaching materials
- Gain a relevant and improved understanding of business requirements and operations.

## 2 Please describe the selected good practice<sup>1</sup> in terms of:

### 2.1 Uniqueness:

<b>Measure Name:</b>		<b>Knowledge Transfer Partnerships</b>	
<b>General description/rationale:</b>			
Launched in 1975 as a programme to encourage business/knowledge base collaborations. Specifically KTP is designed to strengthen the competitiveness, wealth creation and economic performance of the UK by the enhancement of knowledge and skills and the stimulation of innovation through collaborative projects between business and the knowledge base.			
<b>Innovative characteristics as regards:</b>			
<b>Methodology</b>	<b>Organization</b>	<b>Function</b>	<b>Results</b>
A relationship is	Each Knowledge Transfer	1. To facilitate the	<b>Benefits to company partners</b>

<sup>1</sup>A 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>formed between a company and an academic institution ('Knowledge Base' partner), which facilitates the transfer of knowledge, technology and skills to which the company partner currently has no access.</p> <p>Each partnership employs one or more recently qualified people (known as an Associate) to work in a company on a project of strategic importance to the business, whilst also being supervised by the Knowledge Base Partner.</p> <p>Projects vary in length between 12 and 36 months. The Associates are postgraduate researchers, university graduates, or individuals qualified to at least NVQ (Level 4) or equivalent.</p>	<p>Partnership is part funded by a Government grant to the Knowledge Base Partner. This contributes to the costs that the Knowledge Base Partner incurs through participating in that particular Knowledge Transfer Partnership, whilst the balance of the costs directly attributable to a Knowledge Transfer Partnerships Associate's Project is borne by the company partner.</p> <p>The scheme is currently funded by fifteen UK Government organizations led by what was the Trade and Industry (DTI) – now the Department of Innovation Universities and Schools.</p> <p>In 2005/06 the grant support to new partnerships across the UK was over £36.5m with over £54m from participating companies.</p> <p>The Knowledge Transfer Partnerships Programme is currently managed by Momenta who were awarded a 4-year Management contract on 1 October 2004. But most University and regional development agency has a contact responsible for promoting the scheme to its local companies.</p>	<p>transfer of knowledge through projects undertaken by high calibre, recently qualified people under joint supervision from a company and an academic institution</p> <ol style="list-style-type: none"> <li>2. Provide company-based training for recently qualified people to enhance their business and specialist skills</li> <li>3. Stimulate and enhance business-relevant training and research undertaken by the academic institutions</li> <li>4. Increase the interaction between businesses and academic institutions, and awareness of the contribution academia can make to business development and growth</li> </ol>	<p>Business performance outputs vary from case to case, but according to Knowledge Transfer Partnership figures: 52% of companies who completed a final report had an increase in the overall value of the business whilst 62% had an increase in sales.</p> <p>Latest results show that the business benefits that can be expected are, on average:</p> <ul style="list-style-type: none"> <li>• An increase in annual profit of over £290k</li> <li>• 8 genuine new jobs created</li> <li>• Investment in plant and machinery of over £220k</li> <li>• Commercial benefits from application of IP~24%</li> </ul> <p><b>Companies benefit from:</b></p> <ul style="list-style-type: none"> <li>• Opportunities to develop competitive advantage by linking with academia</li> <li>• The high caliber of graduates accessible through Knowledge Transfer Partnerships</li> <li>• Transfer of knowledge/expertise</li> <li>• Embedding of innovation culture</li> </ul> <p><b>Benefits to academic institutions</b></p> <p>Knowledge Transfer Partnerships provide academic institutions with the potential to:</p> <ul style="list-style-type: none"> <li>• Apply knowledge and expertise to important business problems</li> <li>• Develop business-relevant teaching and research materials</li> <li>• Identify new research themes and undergraduate and postgraduate projects</li> <li>• Gain a relevant and improved understanding of business requirements and operations</li> <li>• Lead rewarding collaborations with innovative businesses</li> <li>• Assist strategic change in businesses</li> </ul>
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## 2.2 Relevance:

<b>Problem</b>	<b>Solution that was provided</b>
Lack of Innovation in Small and Medium Sized Businesses Increasing Innovation, creativity and R&D within SMEs	The scheme gives access to world-class R&D expertise without the need to have dedicated R&D function – which they in most likelihood cannot afford. It enhances entrepreneurial spirit among young people who are given responsibility for implementing strategic innovations in real-life scenarios.
Failure of SME to address strategic changes imposed by changing business environments Improving knowledge transfer from the public sector research base into industry	The scheme allows companies to access the creative thinking and problem-solving capability of post-graduates and academics with expertise in their field. Managed risk environment within which a business can undertake strategic change
Improving University understanding of industry problems	Increasing the interaction between businesses and academic institutions, and awareness of the contribution academia can make to business development and growth
Difficulties in placing graduates into employment	Increasing graduate employment
Lack of technical training amongst SMEs	Access to staff that are trained in state of the art processes

## 2.3 Effectiveness:

The scale of the project has provided significant quantitative outputs, including:

- There are over 1,000 Partnerships running at any one time and over 1,100 Associate projects
- For every £1m of government spend the average benefits to the company amounted to an £4.25m annual increase in profit before tax, £3.25m investment in plant and machinery with 112 new jobs created and 214 company staff trained as a direct result of the project
- For the knowledge base partner (higher education institution mainly), on average, each KTP Associate project produces 3.6 new research projects and 2 research papers
- For the Associate 60% are offered and accept a post in their host company on completion of their KTP project.
- 41% register for a higher degree and 67% of these were awarded a higher degree
- In other terms , for every £1 million of Government
  - investment in Knowledge Transfer Partnerships, the benefits
  - achieved by UK businesses amount to:
  - £3.3 million increase in annual profits before tax
  - the creation of 77 genuine new jobs
  - 263 company staff trained.

The project has also provided significant qualitative outputs, including:

- Facilitate the transfer of knowledge through projects undertaken by high level, recently qualified people under joint supervision from a company and an academic institution
- Provide company-based training for recently qualified people to enhance their business and specialist skills
- Stimulate and enhance business-relevant training and research undertaken by the academic institutions
- Increase the interaction between businesses and academic institutions, and awareness of the contribution academia can make to business development and growth

## 2.4 User satisfaction:

Some of the quotes from the “outstanding partnerships as well as the pioneering Business Leaders of Tomorrow” show how successful the program has been so far.

Associates and Clients say:

- “The KTP Project at Arena fast tracked my career from junior manager to company director within three years. I now have the chance to shape many communities in the North of England and build an excellent reputation in my chosen profession” James Robbins- KTP Associate, Arena Housing
- “Overall the KTP project has been one of the best in my working life. The access I have been given to resources, training, professional development and equipment has enabled this to be a highly successful partnership.” Sarah Nunn, KTP Associate, Young’s Home Brew
- “For small companies looking for new skills and new technologies, KTP is a real winner.” James Maxfield; Managing Director-Rigby Speciality Wires Limited
- “The benefits gained through KTP have been immense. Our working practices and methodology have vastly improved and we are now able to provide sophisticated and technologically superior solutions to our clients.” Kevin Hodges; Director Hodges and Drake, Ltd
- “The success of the projects shows the University of York as a dynamic center for industrial collaboration and a place to conduct highly relevant research into problems for the real world.” Professor David Goodall; Department of Chemistry- The University of York

User group	Primary target group (yes/no)	Feedback provided	Explanation for feedback
SMES	Yes	Latest information shows that, on average, the business benefits that can be expected from a single KTP project are:  An increase of over £220,000 in annual profits before tax the creation of three genuine new jobs an increase in the skills of existing staff.	
Academic Institutions	Yes	For the knowledge base partner (higher education institution mainly), on average, each KTP Associate project produces 3.6 new research projects and 2 research papers	
Graduates	Yes	For the Associate 60% are offered and accept a post in their host company on completion of their KTP project. 41% register for a higher degree and 67% of these were awarded a higher degree	

## 2.5 Recognition:

Over the past thirty years Knowledge Transfer Partnerships, and its predecessor, the Teaching Company Scheme, has given British firms new opportunities to break into new technologies, new markets, new processes and production methodologies. Funded under the Science and Technology Act 1965, the Teaching Company Scheme (TCS) was established in 1975 by the Science and Engineering Research Council, based upon the teaching hospital idea - ‘learning by doing’. Originally aimed at engineering projects, Knowledge Transfer Partnerships today covers a wide business spectrum to meet the social, technological and economic priorities of the UK. Knowledge Transfer Partnerships has broadened its remit from the physical and social sciences to the include disciplines such as the arts, the media, and the social environment. It now covers most UK business sectors. The distribution of

companies has seen the service sector continue to increase in importance, in line with general developments within the UK economy. In 2006 it accounted for 22% of the partnership portfolio. The growth of TCS/Knowledge Transfer Partnerships from a handful of partnerships in 1976 to over 1000 today highlights the value that firms place on participation through their commitment and financial investment. The growth in partnership numbers has been met in part through increased public sector contributions, all aimed towards strengthening the competitiveness, wealth creation, social and economic performance of the UK.

KTP is one Europe's leading programme helping businesses to improve their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK knowledge base. And an additional number of 'mini-KTP' schemes have been launched and funded via the ERDF in regions such as Yorkshire and the West Midlands and elsewhere. So KTP has been recognised at a Europe and Regional level. The scheme itself has also been funded by the European Social Fund. It has also been recognized by the majority of UK Research Councils and developed administrations such as the Welsh Government

## **2.6 Context dependency:**

The aim of Knowledge Transfer Partnerships is to strengthen the competitiveness and wealth creation of the UK by the stimulation of innovation in business through collaborative partnerships with the UK knowledge base. With the help of a specialist Knowledge Transfer Partnership Consultant, the client will identify a university, college or research organization that has the right expertise for the elected business. KTP helps the client to define and agree a project that will enable it to draw on their expertise and apply it to the client business. The agreed project can be for any length of time between one and three years, with the overall aim of helping clients' business make a step change in an area identified as high priority for the identified business. As part of every KTP Project, KTP offers a number of Training Opportunities to Associates, Knowledge Base and Company Supervisors. In addition to the experience gained through working on a KTP project and the on-the-job training, Associates have access to a wide range of training opportunities, such as Associate Development Course in support of achieving a Diploma in Management Level 5 accredited by the Chartered Management Institute; additional Training Budget of £1,750 pa per Associate; Higher Degree Qualification based on the KTP Project Working towards Chartered Status of a relevant Professional Institution Company and Knowledge Base Supervisors. A half day workshop providing an in depth introduction to KTP and an opportunity to network with many other KTP partnerships.

### **The modalities of implementation of KTP are the following:**

#### **1. Check the feasibility of your idea**

Not all projects will be suitable for a Knowledge Transfer Partnership. A company will be able to discuss a possible project by speaking to somebody at one of the many university-based KTP Offices, or contact one of our KTP Advisers.

#### **2. Forming a Knowledge Transfer Partnership**

At the heart of a Knowledge Transfer Partnership is the relationship between a company that has a strategic need and a Knowledge Base Partner with the expertise to help the company address that need. Establishing a Partnership is not an automatic process and a good starting point is to contact the nearest university-based KTP Office. If their academics do not have the appropriate subject expertise they will refer you to a potential Knowledge Base Partner that has or bring in one of our KTP Advisers.

#### **3. Completing a Grant Application and Proposal Form**

The Partnership Proposal Form and Grant Application for a Knowledge Transfer Partnership are completed jointly by the prospective Knowledge Base Partner and Company in discussion and with

input and advice from the KTP Adviser. The proposal is, in effect, the first part of the Partnership as well as a means for providing information about the proposed participants and their objectives. It also requires detail on the proposed work plan for the KTP Associate.

#### **4. Submitting the Proposal**

When completed, the Partnership Proposal Form and Grant Application needs to be agreed first by the KTP Adviser and then submitted by the Knowledge Base Partner to the KTP Programme Office for consideration at a forthcoming meeting of the Partnership Approvals Group (PAG).

#### **5. Consideration of Proposals**

The PAG will meet at regular intervals throughout the year. Its membership comprises five senior KTP Advisers, the Programme Director, and an official from the DTI who has the authority to approve Proposals and Grant Applications for Knowledge Transfer Partnerships there and then. A high percentage of applicants are expected to result in grant support, although before a grant offer letter is issued to the Knowledge Base Partner there may be a request for additional information or, for example, for modifications to be made to the proposed Work Plan for the KTP Associate that is incorporated into the Proposal. Potential KTP Partners (both the Knowledge Base Partner and the company) and the KTP Adviser who advised on the Proposal will, normally, be informed within three working days of the PAG meeting of the outcome of the meeting in respect of their Proposal.

#### **6. Issue of a grant offer letter**

A Grant Offer Letter will be issued on behalf of the Secretary of State for Trade and Industry to the Knowledge Base Partner with a copy going to the Company Partner. This will normally happen within three weeks of a Partnership Proposal being approved for support by the DTI on behalf of all the public sector bodies that fund KTP - the KTP Sponsors, but subject to any requirements for further information or for changes to be made to the Proposal. The terms and conditions of the Grant Offer Letter must be accepted in writing by the Knowledge Base Partner.

#### **7. Recruitment of a KTP Associate**

The acceptance of the terms and conditions of the Grant Offer Letter marks the point at which the Partnership can begin to recruit and appoint their KTP Associate(s). The process of recruitment is undertaken jointly by both the Company Partner and the Knowledge Base Partner, although the Associate's contract of employment is with the Knowledge Base Partner. The objective must be to recruit the most appropriate Associate for the work and KTP Advisers and/or KTP Offices will provide advice. Details of prospective Associates who have registered online at the KTP website are also available. Partners should also place a 'Vacancy Notice' using the online facility on the website; this is then made available for viewing by prospective Associates on the appropriate section of the website. In any event, we place brief details of all recently approved Partnerships on the website for potential Associates to view.

### **2.7 Replication:**

The programme is already beginning to work with overseas organizations such as Westlink and the Ontario Centres of Excellence in Canada, and will aim to establish a pilot initiative to identify or make businesses aware of International links and facilitate collaboration prior to, during and after KTP projects.

The **achieved outcomes** from the implementation of the KTP program are multiple and can be summarized as follows:

### **Benefits for the companies**

Final Reports from Partnerships indicated that, as a result of participation in Knowledge Transfer Partnerships, companies achieved increased profitability. Within every category (New Markets, Quality, Increased Sales, Improved Operations), an increased proportion of companies has reported improvements each year since 2003/2004.

- 84% of the cases the results achieved by the companies would be significant to the future performance of the company concerned
- Almost all of the knowledge base partners reported that they had benefited highly from participating in the Partnerships
- 91% benefiting through staff development
- 86% reporting benefits to research
- 89% reporting benefits to teaching
- During the year 2006, 403 new Partnerships were established with SMEs and 84 with large companies
- Overall the proportion of Partnerships with large companies increased by 3% to 16%

### **Academic benefits**

At the end of the year 2006:

- 447 departments from 104 Higher Education Institutions (HEIs) were involved in Knowledge Transfer Partnerships and increase of 33 departments and 4 Institutions from the previous year
- The number of Further Education Institutions (FEIs) participating more than doubled
- Altogether there were 118 knowledge base organizations taking part, an increase of 10% from the previous year
- 8 undergraduate and postgraduate projects have been spun-off, providing valuable industrial exposure to the students

### **Associate benefits**

During 2005/06:

- 492 new Associate were recruited to KTP
- During the year, 194 Associates completed the full term of their contract
- 76% of the Associates were offered employment with their host company
- 79% of the offers were accepted

The **expected outcomes** aim to enhance the breadth and depth of business support on offer, while maintaining KTP as a world-class Knowledge Transfer mechanism.

Listed are some examples:

- Work closely with the English Regional Development Agencies to meet the needs of regional priority sectors
- Build links with mini-KTP initiatives which tend to offer shorter, light touch collaborations between academia and industry
- To offer an international dimension to KTP
- To identify or make UK businesses aware of international links

## **3 Additional information sources**

Name:	
Organisation:	Momenta
Position:	KTP Programme Office
Role experience within the good practice:	
Telephone:	0870 190 2829

Email:	
Address:	Didcot Oxfordshire OX11 0QJ
Web address:	<a href="http://www.ktponline.org.uk/default.aspx">http://www.ktponline.org.uk/default.aspx</a>

## 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?

Without education as a core policy, innovation will remain unsupported. It must promote talent and creativity from an early stage. Improving education (particularly to create interest and excitement in science and technology) and high level of training is essential to keep Europe's human capital (researchers, engineers and other employees) up to date with the skills and knowledge necessary for innovation. Thus, the aim is to facilitate exploration of experiences and attitudes towards creativity, promote new constellations of collaboration and enhance innovation within and across education, scientific fields, business sectors, public sectors and virtual communities.

**Three complementary approaches** are proposed to exploit maximum potential from Europe's innovation potential. In broad outline these approaches are:

- the creation of a European wide electronic portal which will capture and stimulate innovation among the different groups illustrated before;
- the creation of synergies between existing initiatives (awards and contests);
- the promotion of real life events already existing or under development.

#### 4.2 What is the problem for which the cited measure is trying to provide an answer?

**In general:**

- Low level of awareness and involvement of EU citizens in creativity and innovation;
- Innovation is a complex and multidimensional matter in raising awareness;
- Failure to recognise the importance of social innovation;
- Failure to recognise the importance of capturing all innovative activity, especially from non-traditional sources;
- Innovation requires more examples of approachable mentors and support for innovation;
- EU citizens do not debate the innovation;

**KTP:**

- Lack of Innovation in Small and Medium Sized Businesses Increasing Innovation, creativity and R&D within SMEs;
- Failure of SMEs to address strategic changes imposed by changing business environments;
- Improving understanding of industry's problems at universities;
- Difficulties in placing graduates into employment;
- Lack of technical training amongst SMEs.

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

We can't find what the general status of the recognition of raising the awareness and the fully exploitation of Europe's potential to innovate is. The feasibility study shows us that there are already some initiatives around this policy theme.

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

The existing material, suitable for further developments and customizations, can be grouped in two main categories:

1) Existing guidance materials and methodologies developed over time that could provide a framework, i.e. a model or template, to prepare tools such as guidelines, training materials.

Nonetheless, a better approach for innovation is to focus on individuals and how they can transfer their expertise from one domain to another to achieve innovation. Combined with the concept of ‘learning by practice’ - that is people learning about innovation via the practice of others – (on-line) networking is more likely to be effective than the best guidance materials.

2) The existing initiatives can be grouped in the context of the potential innovation communities in four major strands:

- School Students and Youth;
- Higher and Further Education;
- Small and Medium Sized Enterprises;
- Social and Community Innovation activities - Research and Development sector.

#### **4.5 What is the expected outcome of the proposed actions?**

The following points could come out:

- Information about ongoing activities: Our proposal gives a structure to diverse parallel activities and provides them concrete information about the activities that exist in their region. Additionally, with the events they have the possibility to participate and thus learn the practicalities of innovation and creativity in action.
- Increase participation in the innovation activities: It is more than evident that the new generations are investing their time even more in social collaboration tools and in creative activities like for example preparing videos with their mobiles or with their PCs which they then share with their friends via collaborative tools, or by uploading them in the web e.g. in YouTube. Yet this does not mean that we should not enforce events and physical activities.
- Promotion of creativity and the entrepreneurial spirit: The innovation portal could lead together with the real-life physical events that creativity and entrepreneurship are promoted even more and in collaboration with competitions and awards that the entrepreneurial spirit (especially if some sort of incentives e.g. prizes are provided for this) is fostered.
- Synergies: As many of the existing initiatives are comparable, synergies could be achieved by networking these activities via the online platform and to generate an incentive to engage in innovative projects via the creation of a related pan-European innovation initiative.

### **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.**

#### **1. Check the feasibility of your idea**

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The objective must be to recruit the most appropriate Associate for the work and KTP Advisers and/or KTP Offices will provide advice. Details of prospective Associates who have registered online at the KTP website are also available. Partners should also place a 'Vacancy Notice' using the online facility on the website; this is then made available for viewing by prospective Associates on the appropriate section of the website. In any event, we place brief details of all recently approved Partnerships on the website for potential Associates to view.

**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.**

The UK is the fifth largest economy of the world and is the strongest of Europe. The country has one of the most open economies. The economy is stable and there is economic growth which is mostly realised by the service sector. The service sector accounts for two-thirds of GDP, while manufacturing represents less than 20% of national output.

**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?**

**Knowledge Transfer Partnerships (KTP)** is a UK-wide programme to encourage business/knowledge base collaborations. Knowledge Transfer Partnerships was launched in 1975 (previously known until 2003 as the ‘Teaching Companies Scheme’ (TCS)).

Knowledge Transfer Partnerships helps businesses and organisations to improve their competitiveness and/or productivity through the use of the innovation, knowledge, technology and skills that reside within academic institutions, namely:

- Higher Education institutions;
- Research Organisations;
- Further Education Colleges;

At the same time, Knowledge Transfer Partnerships also help to increase the business relevance of knowledge base research and teaching.

Funded by Government organisations led by the (then) Department of Trade and Industry (DTI), Knowledge Transfer Partnerships involve the forming of a partnership between a company (known as the company partner) and your academic institute (known as the knowledge base partner), enabling you to lead rewarding and ongoing collaborations with innovative businesses who require access to skills and expertise to help their company develop.

The Partnership also involves one or more recently qualified people (known as Knowledge Transfer Partnerships Associates) to facilitate this transfer of skills and expertise. An academic supervisor will provide academic supervision to the Associate who works within the company on a project of strategic importance.

Knowledge Transfer Partnerships helps academics:

- Apply their knowledge and expertise to important business problems;
- Develop business-relevant teaching materials;
- Gain a relevant and improved understanding of business requirements and operations.

**Benefits to company partners:**

Business performance outputs vary from case to case, but according to Knowledge Transfer Partnership figures: 52% of companies who completed a final report had an increase in the overall value of the business whilst 62% had an increase in sales.

Latest results show that the business benefits that can be expected are, on average:

- An increase in annual profit of over £290k;
- 8 genuine new jobs created;
- Investment in plant and machinery of over £220k;
- Commercial benefits from application of IP~24%;

**Companies benefit from:**

- Opportunities to develop competitive advantage by linking with academia;
- The high caliber of graduates accessible through Knowledge Transfer Partnerships;
- Transfer of knowledge/expertise;
- Embedding of innovation culture;

**Benefits to academic institutions:**

Knowledge Transfer Partnerships provide academic institutions with the potential to:

- Apply knowledge and expertise to important business problems;
- Develop business-relevant teaching and research materials;
- Identify new research themes and undergraduate and postgraduate projects;
- Gain a relevant and improved understanding of business requirements and operations;
- Lead rewarding collaborations with innovative businesses;
- Assist strategic change in businesses;

## **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?**

Without education as a core policy, innovation will remain unsupported. It must promote talent and creativity from an early stage. Improving education (particularly to create interest and excitement in science and technology) and high level of training is essential to keep Europe's human capital (researchers, engineers and other employees) up to date with the skills and knowledge necessary for innovation.

### **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 Partnership involves one or more recently qualified people (known as Knowledge Transfer Partnerships Associates) to facilitate this transfer of skills and expertise. An academic supervisor will provide academic supervision to the Associate who works within the company on a project of strategic importance.

The aim of Knowledge Transfer Partnerships is to strengthen the competitiveness and wealth creation of the UK by the stimulation of innovation in business through collaborative partnerships with the UK knowledge base. With the help of a specialist Knowledge Transfer Partnership Consultant, the client will identify a university, college or research organization that has the right expertise for the elected business. KTP helps the client to define and agree a project that will enable it to draw on their expertise and apply it to the client business. The agreed project can be for any length of time between one and three years, with the overall aim of helping clients' business make a step change in an area identified as high priority for the identified business. As part of every KTP Project, KTP offers a number of Training Opportunities to Associates, Knowledge Base and Company Supervisors. In addition to the experience gained through working on a KTP project and the on-the-job training, Associates have access to a wide range of training opportunities, such as Associate Development Course in support of achieving a Diploma in Management Level 5 accredited by the Chartered Management Institute; additional Training Budget of £1,750 pa per Associate; Higher Degree

Qualification based on the KTP Project Working towards Chartered Status of a relevant Professional Institution Company and Knowledge Base Supervisors. Finally, a half day workshop providing an in depth introduction to KTP and an opportunity to network with many other KTP partnerships.

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

The **achieved outcomes** from the implementation of the KTP program are multiple and can be summarized as follows:

#### **Benefits for the companies**

Final Reports from Partnerships indicated that, as a result of participation in Knowledge Transfer Partnerships, companies achieved increased profitability. Within every category (New Markets, Quality, Increased Sales, Improved Operations), an increased proportion of companies has reported improvements each year since 2003/2004.

- 84% of the cases the results achieved by the companies would be significant to the future performance of the company concerned;
- Almost all of the knowledge base partners reported that they had benefited highly from participating in the Partnerships;
- 91% benefiting through staff development;
- 86% reporting benefits to research;
- 89% reporting benefits to teaching;
- During the year 2006, 403 new Partnerships were established with SMEs and 84 with large companies;
- Overall the proportion of Partnerships with large companies increased by 3% to 16%;

#### **Academic benefits**

At the end of the year 2006:

- 447 departments from 104 Higher Education Institutions (HEIs) were involved in Knowledge Transfer Partnerships and increase of 33 departments and 4 Institutions from the previous year;
- The number of Further Education Institutions (FEIs) participating more than doubled;
- Altogether there were 118 knowledge base organizations taking part, an increase of 10% from the previous year;
- 8 undergraduate and postgraduate projects have been spun-off, providing valuable industrial exposure to the students;

#### **Associate benefits**

During 2005/06:

- 492 new Associates were recruited to KTP;
- During the year, 194 Associates completed the full term of their contract;
- 76% of the Associates were offered employment with their host company;
- 79% of the offers were accepted;

The **expected outcomes** aim to enhance the breadth and depth of business support on offer, while maintaining KTP as a world-class Knowledge Transfer mechanism.

Listed are some examples:

- Work closely with the English Regional Development Agencies to meet the needs of regional priority sectors;
- Build links with mini-KTP initiatives which tend to offer shorter, light touch collaborations between academia and industry;
- To offer an international dimension to KTP;
- To identify or make UK businesses aware of international links;

#### **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?**

Over the past thirty years Knowledge Transfer Partnerships and its predecessor, the Teaching Company Scheme, has given British firms new opportunities to break into new technologies, new markets, new processes and production methodologies. Funded under the Science and Technology Act 1965, the Teaching Company Scheme (TCS) was established in 1975 by the Science and Engineering Research Council, based upon the teaching hospital idea - 'learning by doing'. Originally aimed at engineering projects, Knowledge Transfer Partnerships today covers a wide business spectrum to meet the social, technological and economic priorities of the UK. Knowledge Transfer Partnerships has broadened its remit from the physical and social sciences to include disciplines such as the arts, the media and the social environment. It now covers most UK business sectors. The distribution of companies has seen the service sector continue to increase in importance, in line with general developments within the UK economy. In 2006 it accounted for 22% of the partnership portfolio. The growth of TCS/Knowledge Transfer Partnerships from a handful of partnerships in 1976 to over 1000 today highlights the value that firms place on participation through their commitment and financial investment. The growth in partnership numbers has been met in part through increased public sector contributions, all aimed towards strengthening the competitiveness, wealth creation, social and economic performance of the UK.

Some of the quotes from the "outstanding partnerships as well as the pioneering Business Leaders of Tomorrow" show how successful the program has been so far.

Associates and Clients say:

- "The KTP Project at Arena fast tracked my career from junior manager to company director within three years. I now have the chance to shape many communities in the North of England and build an excellent reputation in my chosen profession" James Robbins- KTP Associate, Arena Housing
- "Overall the KTP project has been one of the best in my working life. The access I have been given to resources, training, professional development and equipment has enabled this to be a highly successful partnership." Sarah Nunn, KTP Associate, Young's Home Brew
- "For small companies looking for new skills and new technologies, KTP is a real winner." James Maxfield; Managing Director-Rigby Speciality Wires Limited
- "The benefits gained through KTP have been immense. Our working practices and methodology have vastly improved and we are now able to provide sophisticated and technologically superior solutions to our clients." Kevin Hodges; Director Hodges and Drake, Ltd
- "The success of the projects shows the University of York as a dynamic center for industrial collaboration and a place to conduct highly relevant research into problems for the real world." Professor David Goodall; Department of Chemistry- The University of York

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

Knowledge Transfer Partnerships helps businesses and organisations to improve their competitiveness and/or productivity through the use of the innovation, knowledge, technology and skills that reside within academic institutions. At the same time, KTP also helps to increase the business relevance of knowledge base research and teaching.

The preceding demonstrates that KTP is a solid instrument to stimulate innovation as well in SMEs as well as at universities. Results show there is a win-win-win between each of the involved parties. In our opinion amongst other characteristics, it is important that SMEs are helped in the formulation of their problem. In being able to translate the problem of the SME into a question that is workable by people at the university an important gap is bridged. KTP is an initiative that could have a positive effect on many regions in which there is the same kind of open culture as there is within the UK.