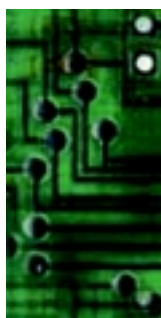
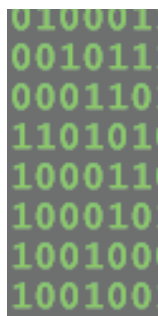




Promotion of Innovation and
Encouragement of SME Participation



Promoting the Use and Exploitation of Intellectual Property Rights in European Higher Education Institutes



A European research project co-funded
by the European Commission, DG Enterprise,
under the 4th Framework Innovation Programme

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The topic

The protection of research and development (R&D) results by Intellectual Property Rights (IPR) provides the basis for successful commercial exploitation and the start-up of sustainable companies capable of competing in a

global market, especially in the field of high technology. Many obstacles prevent researchers in Higher Education Institutes from protecting their R&D results by means of IPR. The NEICO project aims to introduce a

variety of pioneering IPR promotion and management tools to universities in order to facilitate the transfer of R&D results into marketable products.

The objectives

The overall aim of this pilot project is to stimulate the innovation process by promoting the use and exploitation of Intellectual Property Rights (IPR), particularly patents, in European Higher Education Institutes (HEI). This results in a strengthening of the interactions between university, industry and the market and leads to more efficient exploitation of R&D results.

Within the NEICO project, four pioneering schemes entitled UPAS, SAFE, BUS and InnoTULI™, all provided by consortium members, are adapted to the regional peculiarities of NEICO partner universities, tested within the framework of pilot projects and finally evaluated with regard to their performance. The Intellectual Property (IP) management schemes are disseminated on a regional level to promote their transfer to other HEIs.

The four schemes are:

UPAS:

A scheme provided by the University of Valencia to develop communication and R&D exploitation structures in HEIs. The scheme describes how to set up an “Interface Unit” (IU) with the aim of dynamising the academic and administrative staff and stimulating innovation in the university. The IU provides services for researchers, reduces obstacles in the R&D management process and improves communication between different groups throughout the university.

SAFE:

A programme provided by the Ministry of Research & Education of North Rhine-Westphalia (NRW) to promote the use of patents in the HEIs of NRW. SAFE is a systematic approach to source and evaluate inventions, including a first novelty search and the initiation of a patent application in collaboration with the inventors. The financing of patent applications is supported by public funds.

BUS:

A programme closely linked to SAFE which helps inventors drafting a business summary for the presentation of R&D results already protected by IPR to the stock market or venture capital organisations.

InnoTULI™:

A collaboration model provided by Finntech Finnish Technology whose aim is to source, select and evaluate inventions and to give recommendations for commercial upgrading. In the InnoTULI™ process, partly realised as a virtual team model, experts from different fields of innovation work closely together in order to find individual commercialisation strategies for each single invention.

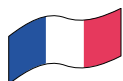
The results

A number of pilot projects are in progress at the NEICO partner institutions to implement one or more of the above mentioned schemes:



The Universidad Politécnica de Valencia (UPV)

has developed an IP management scheme called TRIP on the basis of the SAFE programme. TRIP is used to evaluate inventions originating from university research, and its aim is to initiate patent applications.



X-TECHNOLOGIES / Ecole Polytechnique

has adapted the SAFE/BUS programme to protect the IP of entrepreneurs in the local incubator, in order to promote the start-up of sustainable companies. The newly developed programme is called X-INVENTION. The concept of InnoTULI™ will be used to find individual ways for the commercial upgrading of inventions.



The Politecnico di Milano (POLIMI)

has created new IP management structures on the basis of the SAFE programme, in order to protect inventions arising from the research and technology sector at POLIMI and from other universities in the region of Lombardy.



The Dublin Institute of Technology (DIT)

implements UPAS to set up an interface unit offering a range of IPR-related services to researchers. This new IP management structure is embedded in a new innovation park fostering the start-up of companies. It is intended to create a collaboration structure similar to InnoTULI™ throughout Ireland.



The University of Bielefeld

adapts UPAS on the basis of the already implemented SAFE programme with the goal of increasing the awareness of IPR in the university and promoting the use of IPR for the protection of R&D results.



*The NEICO-Consortium (from left to right):
Mauro Pezze (POLIMI),
Dominique de Lapparent (XTEC),
Jyrki Ingman (Finntech),
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Margaret Whelan (DIT),
Henning Reimann (EuroConsult),
Concha Ginestar (CTT),
Rea O'Neill (DIT),
Anette Traude (Bielefeld),
Fernando Conesa (CTT),
Lieselotte Krickau-Richter (EuroConsult),
Birgit Wirsing (EuroConsult).*



The institution

EuroConsult, affiliated with the University of Bonn, was established in 1991 as a non-profit organisation financed by and subordinated to the Ministry for School, Educa-



tion, Science and Research of North Rhine-Westphalia (NRW). The University of Bonn was founded in 1818 and is among the largest universities in Germany. It ranks as third largest university in NRW, with eight faculties and approximately 38,000 students. The academic reputation of the University of Bonn is determined by the achievements of its 550 professors, 2,500 additional academic staff and 4,700 non-academic personnel.

EuroConsult— University of Bonn

Euro Consult
Research & Education

Its mission

As a regional contact point for the EU-RTD programmes “Innovation”, “Improving Human Potential — Training and Mobility of Researchers” and “International Co-operation” EuroConsult is involved in the so-called “Europa-Kompetenz-Netzwerk der NRW-Hochschulen”, a decentralised network for the consulting and management of EC-funded research projects in NRW.

EuroConsult’s clients are the administrative staff and researchers from the 53 Higher Education Institutes (HEI) in NRW. In addition, EuroConsult mediates and co-ordinates co-operation between HEIs in NRW, industry and European partner institutions within the framework of European or publicly funded projects. These activities also include close co-operation with technology transfer offices.

Contributions to and benefits from NEICO

As the co-ordinator of NEICO, EuroConsult forms the link between the partner consortium and the European Commission, and is responsible for the management and supervision of the project. Besides providing and maintaining a structure for information exchange between the partners in form of a common data platform in the internet, EuroConsult organises conferences and meetings to monitor the project progress.

In future, EuroConsult will take on an advisory function for additional European universities interested in exploiting the results of NEICO by mediating the contacts to the respective know-how provider, maintaining public relations and lobbying the distinct strategies on a European level.



Politecnico di Milano

The institution

The Politecnico, founded in 1863, is one of Europe's ten leading technical universities. The interactions between Politecnico di Milano and a network of industrial partners is maintained and expanded by the "Associazione Impresa Politecnico" (the Association of the Politecnico as a Corporate Enterprise). New schemes that may be hatched through a system of interconnected centres in Lombardy include a well-developed plan of technological innovation, and the "Politekne Network", a project aimed at promoting technology transfer, the development of applied research, and the creation of "incubators". Apart from this, the Politecnico has launched an "alliance project" to reinforce the co-operation between the worlds of industry and finance, governmental bodies, the centres of education and research, and cultural associations.

The mission of „Associazione Impresa Politecnico“

The "Associazione Impresa Politecnico" is articulated in three different parts:

Sportello tecnologico:

A structure of services to strengthen the network of interconnection between Politecnico and SME's.

Politecnico innovazione:

A structure for the promotion and management of research plans and consulting services. The core of activity is the creation of a network for innovation and technological transfer from the University to the industrial sector.

POLIEDRA (Cefriel, Mip):

Since its foundation in 1988, *Cefriel* has been a centre of excellence for the transfer of technologies in the information processing sphere. *Mip* serves to promote training activities and applied research on a high quality level to introduce innovation in the process of business and public corporate management, focussing on new technologies.

Contributions to and benefits from NEICO

The NEICO project has led to the foundation of an internal patent office at the Politecnico di Milano. Within the framework of the project, Politecnico di Milano adapted the core of SAFE and BUS schemes to the specific regional context. Training and advertising activities to raise awareness were also organised.



*Mauro Pezze (POLIMI),
Birgit Wirsing (EuroConsult)*



Universidad Politécnica de Valencia

The institution

The Universidad Politécnica de Valencia (UPV) is a public university with approximately 35,000 students, 1,800 teachers and professors and an annual budget of 168,000,000 Euro. The Technology Transfer Centre (CTT), created in 1989, is a management unit belonging to UPV as an interface unit between UPV and its surrounding environment (companies, institutions, etc.).



CTT is affiliated with the Spanish network of offices for the transfer of research results, the OTRI/OTT network, which provides access to extensive information on the activities of other universities and public research centres (CPIs) of the regional and central government and of the EU. Through CTT, the UPV is also member of the European Association of Research Managers and Administrators (EARMA).

The mission of CTT

A major objective of CTT is to mobilise academics to become involved both in research programmes and in technological co-operation with companies. CTT provides information on R&D programmes, gives support to the proposal definition, searches for suitable partners, manages the project's budget, identifies, protects and disseminates researchers' R&D results and Intellectual Property Rights (IPR), looks for co-operation partners and manages technology transfer activities.

Contributions to and benefits from NEICO

CTT has expertise in the raising of awareness for innovation activities at UPV. UPAS is a scheme developed for that purpose and is the main CTT contribution to the other NEICO partners. Within NEICO, UPAS will be transferred from UPV to the Dublin Institute of Technology and the University of Bielefeld. On the other hand, IPR management is one of the strategic services that CTT plans to make use of. Through NEICO, CTT will benefit from the consortium knowledge in patent evaluation and transfer. CTT will adapt the SAFE/BUS model for the assessment of patent applications in universities and business summaries for the presentation of already patented ideas.

Ecole Polytechnique X-TECHNOLOGIES

The institution

The Ecole Polytechnique, founded two hundred years ago, offers advanced undergraduate studies and graduate studies for French and foreign students. Admission is selective with exclusive procedures open to applicants, a standard admission procedure which focuses on mathematics and physics, or international admission procedure open to students with two to three years of university studies in sciences. The Ecole's internationally renowned Research Centre includes 25 laboratories encompassing almost every scientific field.

Polytechnique graduates hold key positions in a wide variety of domains including industry and business, government and research.

In 1992, Ecole Polytechnique created a technology centre called X-TECHNOLOGIES (XTEC) whose aim is to assist in the creation of high technology enterprises issuing from the Ecole Polytechnique.

The mission of XTEC

XTEC helps Ecole Polytechnique graduates and post-doctorates with the industrial and commercial exploitation of their research results. XTEC has recognised that intellectual property is the only way of giving financial value to the results of



work carried out by researchers and providing revenue for laboratories. Consequently, XTEC promotes the use of Intellectual Property Rights (IPR) as the most important prerequisite for the commercial exploitation of high-tech inventions with world-wide market potential. Together with the large research institutions of the Ile-de-France region, XTEC provides the necessary resources to foster the start-up and development of high technology enterprises.

Contributions to and benefits from NEICO

Since XTEC considers IPR, especially patents, to be the basis for the creation of financially stable high-tech enterprises, a programme has been set up within the framework of NEICO called X-INVENTION. This programme is an exact adaptation of the SAFE scheme, and its aim is to create high-tech enterprises on the basis of patents. In addition, the BUS scheme is applied for the presentation of inventions to financial organisations in order to obtain funding. The programme InnoTULI™ will be implemented for the step of commercial upgrading of inventions.

*Fernando Conesa
(left, CTT Valencia),
Dominique de
Lapparent
(X-TECHNOLOGIES)*



Finntech Finnish Technology

The institution

Finntech Finnish Technology Ltd Oy, founded in 1984, is located in Otaniemi Science Park (Innopoly) near Helsinki, which is the biggest science park in Northern Europe. The Science Park forges a link between scientific knowledge and business. It provides technology-based companies with space, synergy and practical help necessary for running their businesses. Qualified research and educational services work close together here.

Contributions to and benefits from NEICO

Within NEICO, Finntech is the know-how provider for the InnoTULI™ scheme, which has been implemented in the technology centre at the Otaniemi Science Park, Finland since 1994. The transfer of the currently nationally applied scheme to a European level within the project will allow an evaluation of the scheme in different regional contexts.

The mission of Finntech

Finntech's principal function is to secure the commercial exploitation of primarily publicly funded research. Finntech welcomes inventions primarily from researchers, laboratories and research units of the Helsinki University of Technology (HUT) and the Technical Research Centre of Finland (VTT) in order to evaluate their commercial potential and possible routes for exploitation. With 12,300 under- and postgraduate students it is the biggest and oldest university of technology in Finland. VTT is the largest and most versatile research organisation within the Nordic countries with 2,600 employees in nine research institutes. Finntech offers HUT and VTT realisation opportunities for product development projects in the form of industrial joint ventures. Finntech has long-term experience in realising co-operative projects between industry, research communities, and risk financiers. In this context Finntech offers the services of product marketing, licensing, technology brokerage, and project management.

Dublin Institute of Technology

The Institute

The Dublin Institute of Technology (DIT), with academic traditions going back over 100 years, is the largest third-level institution in the Republic of Ireland, with a total enrolment of 23,000 students.

The mission of the DIT

The DIT plays a leading role in the development of technical, technological and business education in Ireland. It is deeply involved with the latest developments in technology in all areas, while maintaining its commitment to industrial, economic and cultural developments on both local and national levels.

The Project Development Centre (PDC), the enterprise unit of the DIT, assists graduate entrepreneurs in the areas of innovation, product development and enterprise creation. The Centre gives support and training to entrepreneurs through the start-up and growth phases of their business development. It provides a comprehensive range of services and products, including skills deve-

lopment programmes, incubation space and facilities, business counselling and funding and access to R&D expertise. To date, over 230 companies have been established through the Centre's start-up programme. The Centre also runs a programme for fast growth companies; 47 companies have participated in this programme so far. In 1995, the PDC initiated the Small Enterprise Seed Fund. This fund provides 'seed' funding at levels of between £50,000 — £100,000 to early stage companies.

The Centre's new venture 'Docklands Innovation Park' is one of the largest incubators in Ireland and provides a dynamic environment which facilitates enterprise development and the commercialisation of R&D.

Within the framework of NEICO, the Institute has elaborated pilot projects for the parallel implementation of the UPAS and InnoTULI™ schemes. With the adoption of the UPAS model, the objective is to stimulate, encourage and facilitate R&D initiatives within the Institute. A central aspect of the strategy is to promote awareness of IPR throughout DIT. Overall, the aim is to develop a structured process for handling innovation through to commercialisation.

Contributions to and benefits from NEICO

Through the implementation of InnoTULI™, it is intended to set up a network of Irish universities, relevant public bodies and industry. The role of this network is to



drive the innovation process by pooling the partners' resources. Central to this is the establishment of the 'Docklands Innovation Evaluation Unit', an activity centre linking the DIT to other universities, state organisations and the private sector.

*From left to right:
Anne Saunders (DIT),
Anette Traude (Bielefeld),
Margaret Whelan (DIT).*

University of Bielefeld

The institution

Founded in 1969, the University of Bielefeld is a relatively young university. It comprises fourteen faculties with 20,000 students and 500 professors. The “Technology Transfer Office” of the University of Bielefeld was created in 1989 and is embedded in the structure of the University. It forms a link between academics holding a patent or business idea and industry/entrepreneurship. In 1995, a campus-related company — the “Institute for Innovation Transfer at the University of Bielefeld GmbH” (IIT GmbH) — was founded to provide a legal framework for commercial pilot projects launched by university entrepreneurs.

The mission of the Technology Transfer Office

The “Technology Transfer Office” is a public, non-commercial agency for the transfer of academic and scientific knowledge to commercial application. Besides refining business ideas to market maturity, the transfer office also seeks to identify interested parties in industry for business ideas, partly based on patents, developed by academics. Information services and innovation support with special focus on the protection of IPR are provided for members of the University of Bielefeld as well as for regional SME's.

Contributions to and benefits from NEICO

Within the framework of NEICO, the University of Bielefeld has already performed an assessment on the usage of IPR tools in the region of East-Westphalia-Lippe and an analysis of obstacles for scientists dealing with IPR tools and their special demands. A variety of actions for the implementation of the UPAS awareness scheme were initiated at the University of Bielefeld in summer 1999, supported by a grant of the North Rhine-Westphalian Ministry for Research and Education. At present, the implementation of UPAS is concentrated on seven workshops intended to “dynamise” different groups within the University of Bielefeld. The implementation of UPAS could be combined successfully with two other German programmes, called INPAT and SAFE, focussing on questions of IPR usage in universities. In addition to this, the University of Bielefeld has intensified its co-operation with patent organisations and has installed a new “service-point for questions concerning IPR usage”.



Loughborough University

The institution

Loughborough University is located in the heart of England and hosts a community of 11,000 students from 100 countries around the world. Throughout Loughborough University's history — from the early days of the famous Loughborough Colleges in 1909 — to University status in 1966, Loughborough has built upon its distinctive characteristics. It offers a special mix of opportunities such as innovative teaching and learning, strong links with industry and the professions, and vocational courses with students and employers.

Loughborough has maintained near-perfect teaching quality in assessments by the Higher Education Funding Council for England. All the departments assessed in the recent round of Teaching Quality Assessments were awarded a minimum of 21 points out of a maximum of 24.

The mission of the Intellectual Property Office

The Intellectual Property Office (IPO) exists to support and encourage the protection and exploitation of IP at Loughborough University.



Contributions to and benefits from NEICO

The UK government is nowadays actively encouraging universities to transfer their technology to industry. Consequently there is a growing amount of support available for small firms spinning out of universities, and much attention is being

focused on bridging the 'equality gap' for inventors who wish to take a prototype to market. Loughborough University receives training on the InnoTULI™ programme, dealing with different systems of IP protection and exploitation.

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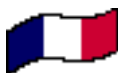
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More information on the NEICO-Project is available at:
<http://www.euroconsult.uni-bonn.de/innovation/neico/>