

# **EUROPEAN TREND CHART ON INNOVATION**

Trend Report:  
“Innovation and IPR”

Covering period:  
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**EUROPEAN COMMISSION, DIRECTORATE GENERAL  
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**“INNOVATION AND SME” PROGRAMME**

## **The European Trend Chart on Innovation**

Innovation is a priority of all Member States and of the European Commission. Throughout Europe, hundreds of policy measures and support schemes aiming at innovation have been implemented or are under preparation. The diversity of these measures and schemes reflects the diversity of the framework conditions, cultural preferences and political priorities in the Member States. The "First Action Plan for Innovation in Europe", launched by the European Commission in 1996, provided for the first time a common analytical and political framework for innovation policy in Europe.

Building upon the Action Plan, the "*Trend Chart on Innovation in Europe*" is a practical tool for innovation policy-makers and scheme managers in Europe. Run by the "Innovation" directorate of DG Enterprise, it pursues the collection, regular updating and analysis of information on innovation policies at national and Community level, with a focus on innovation finance; setting up and development of innovative businesses; the protection of intellectual property rights and the transfer of technology between research and industry.

The Trend Chart serves the "open policy co-ordination approach" laid down by the Lisbon Council in March 2000. It supports policy-makers and scheme managers in Europe with summarised information and statistics on innovation policies, performances and trends in the European Union. It is also a European forum for benchmarking and the exchange of "good practices" in the area of innovation policy.

### **The "Trend Chart" products**

The Trend Chart on Innovation has been running since January 2000. It tracks innovation policy developments in all EU Member States, plus Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Liechtenstein, Lithuania, Norway, Poland, Romania, Slovak Republic and Slovenia. The Trend Chart web site ([www.cordis.lu/trendchart](http://www.cordis.lu/trendchart)) will provide access to the following services and publications, as they become available:

- a database of policy measures across Europe;
- a "who is who?" of agencies and government departments involved in innovation;
- a series of six-monthly country reports for all countries covered;
- a series of six-monthly trend reports covered on each of the four main themes;
- a number of benchmarking reports;
- the European Innovation Scoreboard and other statistical reports;
- a news service and thematic papers;
- the annual reports of the Trend Chart;

The present report was prepared by Isabelle PIERRINI, INBIS Ltd.. The information contained in this report has not been validated in detail by the Member States or by the European Commission.

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## 1. Executive Summary

From a public policy viewpoint, it has been recognised that the European Union needs to build and reinforce awareness of the importance of Intellectual Property Rights (IPR) at the crossroads of innovation and competition. In other terms, IPRs have been and have to be considered as an essential feature of a successful innovative economy. This is seen in the general policy area. In the European Union, particular impetus was given by the Green Paper on Innovation (1995) and the subsequent First Action Plan for Innovation in Europe (1996), which stressed the importance of IPR to innovation and competitiveness and prioritised several areas for policy action. Policies have also been addressed towards specific sectors or problem areas, such as genetic engineering and computer software.

The purpose of this report is to identify a set of general trends in the field of IPR activities and innovation, in which context the information contained in the ‘Trend Chart’ database can be viewed. The present paper specifically covers information reported by correspondents over the period July 2000 – December 2000. It should, however, be noted that trends over such a short timescale will often be difficult to discern as changes in this field are neither rapid nor even over time. Indeed, in the past six months, most European countries have made no major changes to their innovation policies and continue to develop mainly their previous policies. Moreover, it should be noted that this framework only contains information about the relationship between innovation policies and IPR and especially about policies that modify IPR conditions.

It is also necessary to bear in mind that all the countries are not concerned in the same way by these general trends related to innovation and IPR. Indeed, even though a unique plan is going to be followed, it is important to mention that the “accession countries” have various specific characteristics that justify their IPR standards being sometimes different to those of the EU countries. In this way, the “accession countries” are implementing reforms that are likely to outline new laws on patents and trade marks, the adoption of laws on competitiveness and public support to enterprises according to EU standards, and finally to outline the economic strategy in the run up to EU accession.

Nevertheless, the clearest single trend detected in this field is a **recognition that intellectual property rights are an essential and integral part of innovative and competitive economies**. There has been a resulting movement of the field of IPR from being a rather specialised and often obscure legal discipline, even within companies, into the mainstream of innovation policy. In the modern knowledge-driven economy, research results and other intangible assets are often crucial to the fortunes of major business sectors and the emergence of new companies and sectors, often in the most technology-dependent and fast-growing markets. Parallel policy emphasis on the process of technology transfer, particularly between the public and the private sectors, has further underlined the importance of a predictable and stable framework for IPR issues.

As mentioned in the previous report other trends may also be detected:

- **strong IPRs are now associated with innovation policies**, although this assumption is not without controversy, and there are increasing signs that IPRs, as a result of their increasing prominence in policy debates, are also becoming the focus of more critical attention, from a variety of sources. Various means are being used to strengthen IP protection and thus encourage innovation: lowering the costs of acquiring and maintaining patents; increasing the coverage of IPRs; new measures (e.g. “grace periods”,

supplementary protection); costs of litigation; and stronger enforcement measures. There are, however, some countervailing trends, prompted, for example, on the basis of moral or ethical considerations.

- The increasingly international nature of trade has led to **growing harmonization of IPR frameworks**. Two trends are identifiable: Global harmonisation (impact of WIPO); and European harmonisation (in response to existing complexity).
- The **introduction of new technologies and need to include them within IP frameworks** (particularly computer software and biotechnology).
- The **importance of public sector institutions in generating intellectual property**, and the need to revise rules governing their ownership. The exploitation of IP produced by public institutions or from publicly funded projects is the area of most activity in the EU. National governments and the European Commission have focused on several issues: applying pressure to public institutions to exploit their results; revising rules for industrial collaborations; and revising rules governing researchers' rights in public research institutions.
- The **changing roles and functions of national patent offices**. Knowledge generated by the disclosure of information on inventions, contained in patent databases, has been heavily under-utilised in the past. Such databases have been called the largest systematic sources of technical information available and substantial efforts are now being made to remedy their under-utilisation. Patent offices are changing their roles from being repositories of information, to active marketing. In addition, the European Patent Office and several national patent offices have major programmes to increase knowledge and awareness of the databases, and are adopting a more pro-active role in the patent process.
- **Specific public measures to assist companies** (especially SMEs) in acquiring IPRs. Governments have instituted programmes of awareness of the important role of IPRs, sometimes relying on national patent offices.

## 2. Introduction

First of all, it is necessary to remember that the purpose of this paper is to identify a set of general trends in the field of intellectual property rights (IPR) activities and innovation, in which context the information contained in the 'Trend Chart' database can be viewed. The present paper specifically covers information reported by correspondents over the period July 2000 – December 2000. This framework of trends should continue to be valuable for subsequent periods. Bearing this in mind, it is clear that reports will not cover every trend for every country over such a short period. As a consequence, this report should be considered as complementary to the previous one covering the period from December 1999 to June 2000<sup>1</sup> and not as a totally new one. Also, reports will not fit neatly into each category of the framework. To emphasise these points, Table 1 matches trends against countries and identifies reporting examples for the current period. Most cells are empty, as changes in this field are neither rapid nor even over time. It should also be noted that this framework only contains information about the relationship between innovation policies and IPR and especially about policies that modify IPR conditions. Other topical IPR issues (such as the issue of parallel imports/international exhaustion of rights) are not addressed.

From a public policy viewpoint, it is being increasingly recognised that intellectual property rights are an essential feature of a successful, innovative economy. This is seen in the general policy area. In the European Union, particular impetus was given by the Green Paper on Innovation (1995) and the subsequent First Action Plan for Innovation in Europe (1996), which stressed the importance of IPR to innovation and competitiveness and prioritised several areas for policy action. Policies have also been addressed towards specific sectors or problem areas, such as genetic engineering and computer software.

Therefore, the clearest single trend that might be detected in this field is recognition that intellectual property rights are an integral part of innovative and competitive economies. There has been a resulting movement of the field of intellectual property rights from being a rather specialised and often obscure legal discipline, even within companies, into the mainstream of innovation policy. In the modern knowledge-driven economy, research results and other intangible assets are often crucial to the fortunes of major business sectors and the emergence of new companies and sectors, often in the most technology-dependent and fast-growing markets.

It is important to emphasise the purpose of intellectual property rights. Contrary to the often-expressed view of inventors and others, IPRs are not 'moral' measures to ensure that hard work or inspiration is rewarded. From a public policy viewpoint they are a means of encouraging innovation, and have always been so. In order to encourage innovative activities, certain legally enforceable powers are given to inventors to enable them to appropriate a proportion of the benefits which accrue to the community as a result of their efforts. Patents allow the exclusion of non-owners from imitation without permission of the owner for a specified period, which would reduce the benefits accruing to the owner. For the economy, the benefits of induced innovative activities must outweigh the economic and social costs of this temporary monopoly power (artificially high prices, reduced production volumes, etc.). The community defines the terms of this trade-off, and much of the substance of this report is concerned with changes in these terms in response to the emerging new economy.

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<sup>1</sup> Hugh CAMERON, PREST, University of Manchester, has written the previous report on IPR covering the period from December 1999 to June 2000.

Several factors have produced this new focus on intellectual property. In addition to the long established sectors with continuing heavy dependence upon IP (including the pharmaceuticals and mechanical engineering industries), new industries are coming into being (see section 3 below), with new needs for protection. The increasing ease of imitation and copying of designs or of creative performance recordings implies a need for stronger protection for owners. Countries which perceive their competitive advantage to originate from technological advance, wish to retain their advantage for as long a period as possible. World Trade Organisation rules require members to provide effective protection for owners of intellectual property.

### **3. Framework for Analysis**

The general trends identified are:

1. An increasing awareness that IPRs are essential to a successful and competitive economy.
2. The strengthening of IPRs as a means of generating innovation.
3. The international harmonisation of IP legislation.
4. The introduction of new technologies and need to include them within IP frameworks.
5. The importance of public sector institutions in generating intellectual property, and the need to revise rules governing their ownership.
6. The changing roles and functions of national patent offices.
7. Specific public measures to assist companies (especially SMEs) in acquiring IPRs.

These are explained more fully below.

#### **3.1 An increasing awareness that IPRs are essential to a successful and competitive economy**

It is interesting to note that many European countries have identified Intellectual Property as a key area; to this end their Governments have focused their efforts on the protection of IPR, in some cases introducing an IPR Action Plan (Luxembourg, The United Kingdom, and the Netherlands) or strengthening the role and functions of their National Institution for Industrial Property (Portugal and Spain).

In this way, the attention of policy makers and academic researchers has in recent years focused on the concept of 'national systems of innovation'. However, it can be underlined that this situation is encountered more often in the EU countries than in the "accession states" (see Poland country report). The operation of different institutions and policies contributing to innovative performance has been analysed within the context of an interactive system in which the interfaces between these components has been recognised to be important. As an example, some governments have announced a new drive to support the links between research and innovation. In the United Kingdom, for example, the Government introduced a new IP portal in autumn 2000, designed to provide visitors with clear basic information on the full range of IPRs and the part these play in protecting creativity and inventiveness as well as a potential economic and competitive advantage. Other countries such as Greece have launched new programmes that focus on strengthening research in enterprises and the introduction of awards for IPR by the National Organisation for Intellectual Property.

In another way, the efficiency of 'technology transfer' between public sector and private sector organisations has been of particular concern (see section 3.5) in Europe, where it is thought that better use could be made of the scientific excellence of public research institutions: the so-called 'European Paradox'. Intellectual property rights frameworks are an essential element of these systems. They should provide a reasonably predictable and stable environment in which organisations can justify investments in research and development and other creative activities, confident that they will be able to generate sufficient returns in the market without unfair competition from imitators who have not borne the initial costs of research.

It is very important to bear in mind that the transition economies of Eastern Europe, together with the economies of the Far East, are still implementing programmes of internal IPR regulation in order to gain access to the world trading system and to encourage domestic industries which rely on IPRs (e.g. Poland country report).

### **3.2 The strengthening of IPRs as a means of generating innovation**

Overall, strong IPRs are now associated with innovation policies. This is due to the fact that several national policies aim at making IPRs (and especially patents) better known as an instrument to help stimulate innovation. The dominant assumption of policy-makers at present is that strengthened IPRs will lead to greater innovative activity and consequent benefits. This supposition is not, however, without controversy, and there are increasing signs that IPRs, as a result of their increasing prominence in policy debates, are also becoming the focus of more critical attention from a variety of sources.

Various means are being used to strengthen IP protection and thus encourage innovation:

#### **3.2.1 Lowering the costs of acquiring and maintaining patents**

Patents are still expensive to apply for, to maintain and to defend, both in the EU countries and in the “accession countries”. The easiest change to make here is to reduce the application fees, as the European Patent Office (EPO) began to do in 1997.

As the United Kingdom had previously done, in January 2000 France reduced the fees for patent research report by half from €646 to €323, becoming one of the cheapest in Europe. At the same time, during the first half of 2000, the filing of French patents by French companies was still increasing, but at a rate of only 1.5%. Some countries have recently also considered the weight of the costs that are incurred before obtaining the patent (in terms of commercialisation of research results), suggesting that they should form an integral part of the costs of research (Finland country report).

However, the other costs of acquiring and enforcing a patent, such as those of retaining a patent attorney make the reductions rather less substantial overall. Furthermore, in terms of competition with the US or Japan, European countries still suffer from the EPO’s high procedural fees that are more than three times higher than those of the US Patent and Trademark Office and more than four times higher than those of the Japanese Patent Office<sup>2</sup>.

Another specific EU problem is the high cost of multiple patents, including a long-standing problem, that of languages and the translations required in Europe, which will be referred to below.

In this context, another – totally different – way to solve the difficulty of the high costs of protecting IPRs has been suggested by Austria. Indeed, according to this country, competition policy and intellectual property rights are only rarely associated with innovation in public discussions. However, in this sense, Austria has proposed a solution consisting of the abolishment of all subscription fees for start-ups by the Chamber of Commerce. This will reduce the costs associated with the establishment of a new enterprise (Austria country

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<sup>2</sup> Prof. Dr. J. STRAUSS, “The present state of the patent system in the European Union”, European Commission, EUR 17014.

report). As a consequence, even though the costs of protecting IPR are still high, this solution will allow these innovative companies to keep some funds in order to legally protect their innovations.

### **3.2.2 Increasing the coverage of IPRs**

The USA has gone much further than European countries in strengthening its protection, by making it easier to gain rights by extending the coverage of patents, and also by a shifting balance in legal judgements towards the owners of rights. Indeed, in the United States as in Japan, the two main global economic competitors of the European Union, patent protection is not affected by any kind of fragmentation. Inventors in both countries secure their interests country-wide, i.e. for markets of comparable size to the EU, by filling one single application and by the grant of one single patent. Patents are revoked in one centralised procedure and infringements eventually decided at final instance by the same national court.

In this way, some European countries have recently understood the necessity of increasing the coverage of IPRs. As an example, Portugal has decided to support either national or international patenting, as well as the design and implementation of prototypes or experimental premises based on patents already granted (Portugal country report). This incentive system was published in December 2000<sup>3</sup>.

### **3.2.3 New measures**

There is still much discussion in Europe over the possible introduction of a grace period, along US lines, to give more time to inventors after publication of details of their inventions (Belgium country report). Though the grace period is more easily part of the US system ('first to invent'), there is a strong argument that the secrecy implied by the 'first to file' system in other countries might be a constraint on the free movement of information and technical details. Incorporation of a grace period could alleviate this problem, but this has not been possible so far.

It is in some cases possible to introduce particular measures to address particular problems. For example, the introduction of Supplementary Protection Certificates benefited the pharmaceuticals and plant-breeding industries. In future other new measures may include extension of 'petty patents' to more European countries.

### **3.2.4 Costs of litigation**

A major source of dissatisfaction amongst patent system users has been the high cost of enforcement. In particular, this is a European criticism of the USA and at present little progress has been made on this aspect of the patent issue. One possible advance here would be the greater use of insurance policies against litigation costs in defence of patents: a mechanism which is little used at the moment. This would be particularly useful for small and medium sized enterprises (SMEs) which may not be able to withstand the financial power of large companies over a prolonged and expensive legal action.

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<sup>3</sup> The system for supporting the use of industrial property system (SIUPI) has been published in the Official Journal of the 27<sup>th</sup> December 2000.

### **3.2.5 Stronger enforcement measures**

Many countries are assisting industries in identifying and prosecuting IPR infringements. The largest scale and best known of these are the music industry's 'piracy' problem due to the ease of copying recorded music and video performances, and software applications and computer games (Israel country report). Ireland, for example, is addressing the problem of software piracy, in part as a result of having a strong domestic software production industry (Ireland country report).

In order to beat the "intellectual property rights piracy", Spain has proposed some interesting measures: one of them is the specialisation of judges. It could be seen as a very useful measure due to the fact that intellectual property rights constitute a particularly difficult legal field, in the sense that both high technology and law are involved (Spain country report).

Poland, Bulgaria and Estonia provide further interesting examples. In Poland, the latest legislation has considerably strengthened copyright protection and has contributed to curtailing piracy (Poland country report). In Bulgaria, the law amending and supplementing the Copyright and related rights law, which entered into force in May 2000, has introduced measures in respect of border control to commodities infringing copyright and related rights (Bulgaria country report). The Estonian government has devoted serious attention to copyright protection in the area of software, including legislation on the software programmes that the government uses. As a result, the amount of illegal software used in government agencies has decreased to about 10% of all software in use (Estonia country report).

### **3.2.6 Countervailing trends.**

While the dominant trend has been towards stronger IPRs (especially patents), there are also some signs of a growing reaction. Some businesses have criticised the extension of patents to software and business methods for their restrictive effect and weak basis. One body of opinion advocates the reduction of these patents' lifetimes to far shorter periods of five years or even less, compared with the standard 20 year lifetime.

Opposition also comes from environmental, moral and ethical standpoints. The most prominent of these concerns the debate over patents on the human genome, and over patents on genetically modified organisms. This was in part responsible for the delay of the European Patent Directive (1998). There are also those who argue that patents should not be granted on the human genome as this amounts merely to discovery and not invention or innovation.

## **3.3 The international harmonisation of IP legislation**

The increasingly international nature of trade has led to growing harmonisation of IPR frameworks. Two trends are identifiable:

### **3.3.1 Global harmonisation.**

Though international harmonisation has a very long history, for example the reciprocal recognition of copyrights, the increasingly international character of international trade and the formalisation of rules within the World Trade Organisation has put pressure on members and potential members to institute effective protection of intellectual and industrial property. Most prominent in this regard is the World Intellectual Property Organisation (WIPO). Many

countries are introducing measures to harmonise national regulations with international norms (Bulgaria and Latvia country reports).

### **3.3.2 European harmonisation.**

It is generally agreed that the structure of the European patent system is far too complex, consisting of three distinct systems:

- (i) national patent systems exist in all countries of Europe, and lead to the excessive cost of separate applications to achieve wide coverage, including costs of translations and litigation under each jurisdiction.
- (ii) Inventors have the alternative of filing patent applications with the European Patent Office, enabling considerable cost reductions in comparison with serial national applications; this results, however, in a 'bundle of patents' rather than a single European patent. This approach has seen rapid growth since its introduction with the European Patent Convention (1973). It has great flexibility but also considerable complexity and does not achieve the cost reductions which would be possible with a single European patent system.
- (iii) The Community Patent Convention (1975) was an attempt to introduce the single European Patent concept and so reduce European costs to the levels of Japan or the USA. However, this has been considered unsuccessful. It has still not entered into force because of delays in its ratification. A major explanation for this is dissatisfaction with the terms relating to the languages used for patent applications/grants.

As noted above, it is necessary to implement a framework of discussion in the EU centres on the necessity of harmonisation for the establishment of a single market and competitiveness with the USA and Japan. However there is a wide range of opinions about how this should be achieved.

In this sense, on the 1<sup>st</sup> of August 2000, the Commission submitted a proposal for a regulation of the Council on the Community Patent. The objective is to create a new unitary industrial property right in order to eliminate the distortions of the internal market and to enable Europe to reap the full benefits of research and to stimulate private R&D (research and development) investment.

The EU has, however, been successful in other IPR areas, such as the establishment of a Community Trademark, and a Community Plant Varieties system.

Nevertheless, it is also interesting to note that, even though it is a huge task, some European countries take the importance of the European harmonisation of IPR strongly into consideration and are prepared to modify quickly their legislation in a few fields. In this sense, in Spain, a draft law under study will modify the actual Industrial Property Law, adding the European regulation of Biotechnological Innovation to Spanish Law (Spain country report). In Bulgaria as well, the new legislation has implemented all requirements included in the Directives of the EU in the field of copyright and related rights with the exception only of the rights of database makers (Bulgaria country report). In the same way, in October 2000, the Danish Government passed the so-called Designer Bill – coming into force in October 2001 – which implements the Designer Directive (98/71/EC) (Denmark country report).

As a conclusion on this acute issue and as mentioned above, an important gap exists between the EU countries and the “accession countries”. Indeed, the mechanism of the European harmonisation of IPRs should take into consideration the fact that the “accession countries” are very concerned to assimilate firstly a kind of “community acquis” in the IPR field before entering into the European harmonisation of IPR stage itself (Romania country report). However, it is not an attribute common to all the “accession countries”. For example, as Cyprus has recently joined the European Patent Convention and the law is compatible with most European Patent norms, no harmonization problems are expected in this area (Cyprus country report).

### **3.4 The introduction of new technologies and the need to include them within IP frameworks**

The history of IPRs has been one of introduction of new technologies and the incorporation of these into existing rights, or occasionally the institution of new rights to cater for particular needs. In past centuries this has proceeded slowly, but the past decade has seen an acceleration in the rate of technological development and in the speed of application of new technologies, resulting in IPR systems having difficulty in responding in a timely way.

Computer programs and software have been in existence for half a century. Previously protected by copyright, they are now beginning to be covered by patents in the USA. The EU will announce its position on software patenting in late 2000-early 2001.

New business methods relating to the Internet and World Wide Web are patentable in the USA. The question of copyright of domain names is being addressed in several fora, in particular under the auspices of the WIPO.

The pharmaceuticals industry has always been dependent upon patenting to recover the huge costs of developing drugs. The possibilities offered by the new bio-technologies in disease prevention, diagnosis and treatment are now causing difficulties. After some delays, the European Directive on the legal protection of bio-technological inventions was adopted in 1998, aiming to harmonise national patent laws. Certain processes and things cannot be patented, such as human cloning, modification of human gene lines, etc. The discovery of gene sequences does not justify patents, but applications of these are eligible. The recent completion of the draft human genome sequence prompted the joint statement by President Clinton and Prime Minister Blair (the sequencing was carried out in US and UK laboratories) which stated that raw fundamental information about the genetic makeup of the human body should be freely available.

### **3.5 The importance of public sector institutions in generating intellectual property, and the need to revise rules governing their ownership.**

Traditionally, results from publicly funded research have been made publicly available. However, this has changed in recent years. The ‘European Paradox’, identified in the Innovation Green Paper (1995), pointed out that the strength of EU research is not matched by its exploitation, in comparison with the USA and other economic competitors. Thus the exploitation of IP produced by public institutions or from publicly funded projects is the area of most activity in the EU. National governments and the European Commission have focused on several issues in order to remedy this deficiency.

### **3.5.1 Applying pressure to public institutions to exploit their results**

General financial incentives have been used to achieve this in several countries, but in the IP field some particular measures are identifiable:

- *Encouragement of collaboration between companies and public research institutions.* Some measures attempt to improve the flow of information between potential partners in collaborations. One aspect of this has been the need to provide assistance to individuals and institutions to take part in collaborations.
- *Revising rules for industrial collaborations.* Several countries have introduced or are still considering revisions to their public research systems which make public/private collaborations possible or easier, in particular the treatment of IP in universities (e.g. The Netherlands and Norway).

### **3.5.2 Revising rules governing researchers' rights in public research institutions**

In this field, many governments have started to propose measures with important implications in the handling of IP. Revisions are being made in some countries regarding the rights of individual researchers in public institutions, in order to assist in the efficient exploitation of public sector results (Belgium and Germany country reports).

For example, Finland is still enacting a change in its laws which will give such researchers the same rights as those employed in the private sector (Finland country report). In the same way, in October 2000, Germany decided on a change in IPR regulation for universities. It means that researchers will lose their exclusive right on inventions while university administrations get the right to commercialise inventions made by university researchers (Germany country report). The United Kingdom is working on a project in which the guidelines propose a general rule that research providers like Public Sector Research Establishments (PSREs) should own the IP; changes will be made to the Civil Service Management Code so that scientists in the civil service will be able to benefit from helping to exploit their work commercially. In addition, the Government will commit £10 million to a new fund for commercialising IP aimed at PSREs (The United Kingdom country report). In Sweden, the issue of patent ownership in higher education institutions was raised again in the Government research bill of September 2000. Here, a new law implemented in Denmark from 1 January 2000 is highlighted. This law implies that the IPR from innovations belong to the researcher. However, even though Sweden might be in the process of changing its law, the current conclusion of the government is to await conclusions of the Danish experience, which implies that no legal changes will be envisaged for another couple of years (Sweden country report).

### **3.6 The changing roles and functions of national patent offices**

Generally speaking, most European countries have developed a tendency to simplify the administrative procedures related to acquiring IPRs, especially patents (Luxembourg country report). Some National Patent Offices have made an effort to go beyond their traditional role of administering patent applications, to develop a pro-active awareness raising campaign about the importance of patents (Belgium country report).

More accurately, the introduction pointed out that patents involve a trade off between the inventor, who gains a temporary exclusive right over use of the invention, and the community, which gains the benefit of full disclosure of knowledge about the invention. The knowledge

generated by this disclosure, contained in patent databases, has been heavily under-utilised in the past, with the exception of a few sectors including pharmaceuticals. These databases have been called the largest systematic sources of technical information available. Substantial efforts are now being made to remedy the under-utilisation of these. As noted above, Patent offices are changing their roles from being repositories of information to active marketing. New communications and computing technologies are making a revolution possible: patent databases are being made available on-line, and search technologies make identification of relevant information far faster and cheaper.

To achieve this greater exploitation of information, a parallel activity is also occurring: programmes to increase awareness of the availability and nature of the patent databases. The European Patent Office and several national patent offices have major programmes to increase knowledge and awareness of the databases, and are adopting a more pro-active role in the patent process. In particular, SMEs are being targeted as under-users of the information.

Indeed, at the country level, it is interesting to note that Italy has decided to create a specific organisation for patents. In this way, Italy is going to implement a New Agency for Industrial Property (see the White Paper of the Ministry of Industry: Italy country report). In Portugal as well, following its reorganisation, the National Institute for Industrial Property (INPI) has decided to be more active and flexible, with a more pro-active role. (Portugal country report).

In another way, in Denmark, in continuation of the Government's business strategy, a project aiming at improving companies' and researchers' access to patents databases has been launched. The intention is to facilitate single site access to all Danish patents and utility models, and to assemble all information related to patents on a CD-ROM/DVD. An Internet database will also be developed. The project will run to the end of 2003 (Denmark country report).

In this sense, it appears that the roles and functions of National Patent Offices continue to change. National Patent Offices of the EU members have a broad vision for creating partnerships with a view to promoting a favourable environment to use industrial property mechanisms.

### **3.7 Specific public measures to assist companies (especially SMEs) in acquiring IPRs**

Governments have instituted programmes of awareness of the important role of IPRs, sometimes relying on national patent offices, or have developed programmes of awareness for companies (mainly SMEs) to the need for technology watch and intellectual property protection (Israel and Luxembourg country reports). In Spain, a programme aimed at improving, disseminating, and increasing patent system utilisation, especially by SMEs, is currently under way (Spain country report).

However, concerning specific public measures to assist companies, and especially SMEs, in acquiring IPR, it is necessary to introduce a distinction with the situation of the transition economies of Eastern Europe. Indeed, due to the specific characteristics of their national economies, some of these countries define the economic measures and actions to be undertaken in order to establish favourable conditions for the overall development of the SME sector. In other terms, these countries take measures to assist SMEs but not only related to the acquisition of IPR.

As an example, according to Poland, creating these conditions should increase SMEs' abilities to invest more into new technologies as well as to introduce more innovations in order to compete successfully on international markets (Poland country report).

This classification is summarised in Table 1 in the annex.

Table 2 is a summary presentation of the measures that contribute to trends and modality.

## 4. Conclusions

In view of the limited number of IPR measures that were introduced in the period from July 2000 to December 2000, it needs to be remembered that trends over such a short time scale are difficult to discern, as changes in this field are neither rapid nor even over time.

Indeed, the analysis underlines the fact that the previous trends are still valid and to some extent, some of them have spread.

On the one hand, regarding the trends that have not really changed, most of the countries pointed out that they:

- continue to strengthen IPRs as a means of generating innovation;
- still act in the sense of an international harmonisation of IP legislation;
- continue to debate the introduction of new technology within the IP framework.

On the other hand, some of the trends have been reinforced by the adoption of new measures. Indeed, it can be underlined that the awareness that IPRs are essential to a successful and competitive economy has increased in all the countries. From this statement, it also appears that countries have understood the need for important changes. In this way, the emphasis was put on:

- the importance of public sector institutions in generating intellectual property and the need to revise rules governing their ownership;
- the changing roles and functions of national patent offices;
- specific public measures to assist companies (especially SMEs) in acquiring IPRs.

However, it is also necessary to bear in mind that all the countries are not concerned in the same way by these general trends. It is important to remember that the “accession countries” have various particularities that justify the fact that their IPRs standards are sometimes different to those of the EU countries. Related to this situation, an interesting issue would be to determine in which way the “accession countries” will be able to deepen their national IPR protection taking into account the international and the European IP harmonisation.

Finally, it could be interesting to approach such a large theme as “Innovation and IPR” not only from a national approach considering mainly the national measures that have been adopted in this field. This means that the correspondents could adapt their country report to include their position on important EU issues such as petty patents, the patentability of software or the European biotech directive.

## 5. Annex

### 5.1 Table 1. Framework for Analysis (trends, modality and measures)

TREND		
	MODALITY	MEASURE
1. An increasing awareness that IPRs are essential to successful innovation and a competitive economy		
	1. Public policies towards IPRs	IPRs as an integral part of the competitive economy agree on EU actions to further IP protection awareness & other policies targeting SMEs and IPRs cheaper, more convenient IPRs institute national IPR framework & institutions support for inventors, SMEs & other companies
2 The strengthening of IPRs as a means of generating innovation.		
	1. Strengthening rights of IPR owners	easier to gain patents extending period of patent rights bias of legal judgements towards IPR holders
	2. Increasing the coverage of IPRs	extension of patent coverage (software, business methods, algorithms) genetic engineering/human genome, etc.
	3. Lower costs of gaining IPRs	lower application/maintenance costs EU coverage
	4. introduce new measures	petty patents grace period
	5. enforcement measures	reduction of piracy
	6. But, increasing resistance to results of IPRs from:	environmental groups (GM seeds) moral or ethical standpoint (legitimacy of human genome patents) business viewpoint (costs of gaining IPRs, & litigation, barrier to innovation)
3. International harmonisation of IP regulation		
	1. global/international harmonisation	WTO, WIPO
	2. EU harmonisation (European Patent Convention..)	mutual recognition/ EPO or Community Patent
	3. but: increasing resistance to concepts and application (Seattle)	
4. The introduction of new technologies and need to include them within IP frameworks.		
	1. fitting new technologies into existing frameworks	software patents human genome applications electronic trading and IP

<b>TREND</b>		
	<b>MODALITY</b>	<b>MEASURE</b>
5.	The importance of public sector institutions in generating intellectual property, and the need to revise rules governing their ownership.	
	1. pressure for public laboratories/universities, etc to exploit their results for economic (competitiveness) and financial reasons	encouraging collaborations between companies & public institutions rules for industrial/university/public funded research collaboration
	2. new regulations for behaviour of public sector institutions regarding their IP	researchers' rights in universities & public research laboratories
	3. but: fundamental problem of publicly funded research exploited for private benefit.	
	4. revised EU rules on collaboration in EU funded projects	
	5. revised EU rules on competition and collaboration regulations	
6.	The changing roles and functions of Patent Offices	
	1. diffusion of knowledge from patent databases	EPO, national and US patent databases: on-line access
	2. increasing awareness of the importance of IPRs - publicity and training	e.g. German PO, UK Patent Office Special emphasis on SMEs
	3. EU integration/recognition	
	4. pro-active role of patent offices	
7.	Specific public measures to assist companies (especially SMEs) in acquiring IPRs.	
		promotion, advice & awareness of IPRs and their role SME specific assistance re. IPRs assistance for inventors/scientists to acquire IPRs encouraging acquisition of rights, including financial assistance reduced litigation costs accounting/financial recognition of importance of IPRs (e.g. 'intangibles' on balance sheets, tax compliance costs)

## 5.2 Table 2: Summary presentation of the Measures that contribute to trends and modality

(This table is also available as an Excel worksheet for greater clarity)

TREND	MODALITY	MEASURES
An increasing awareness that IPRs are essential to successful innovation and a competitive economy	Public policies towards IPRs	IPRs as an integral part of the competitive economy
		agree on EU actions to further IP protection
		awareness & other policies targeting SMEs and IPRs
		cheaper, more convenient IPRs
		institute national IPR framework & institutions
		support for inventors, SMEs & other companies
		easier to gain patents
		extending period of patent rights
		bias of legal judgements towards IPR holders
		extension of patent coverage (software, business methods, algorithms)
		genetic engineering/human genome, etc.
		lower application/maintenance costs
		EU coverage
		petty patents
		grace period
		reduction of piracy
		environmental groups (GM seeds)
		moral or ethical standpoint (legitimacy of human genome patents)
		business viewpoint (costs of gaining IPRs, & litigation, barrier to innovation)
		WTO, WIPO)
		mutual recognition/ EPO or Community Patent
		software patents
		human genome applications
		electronic trading and IP
		encouraging collaborations between companies & public institutions
		rules for industrial/university/public funded research collaboration
		researchers' rights in universities & public research laboratories
		EPO, national and US patent databases: on-line access
		e.g. German PO, UKPO...
		Special emphasis on SMEs
promotion, advice & awareness of IPRs and their role		
SME specific assistance re. IPRs		
assistance for inventors/scientists to acquire IPRs		
encouraging acquisition of rights, including financial assistance		
reduced litigation costs		
accounting/financial recognition of importance of IPRs (e.g. 'intangibles' on balance sheets, tax compliance costs)		

The strengthening of IPRs as a means of generating innovation.																														
	Strengthening rights of IPR owners	.																												
	Increasing the coverage of IPRs	.																												
	Lower costs of gaining IPRs	.																												
	introduce new measures	.																												
	enforcement measures	.																												
	<b>But, increasing resistance to results of IPRs from:</b>	.																												
International harmonization of IP regulation																														
	global/international harmonization	.																												
	EU harmonization (European Patent Convention..)	.																												
	but: increasing resistance to concepts and application (Seattle)	.																												
The introduction of new technologies and need to include them within IP frameworks.																														
	fitting new technologies into existing frameworks	.																												

The importance of public sector institutions in generating intellectual property, and the need to revise rules governing their ownership.																																				
	pressure for public laboratories/universities, etc to exploit their results for economic (competitiveness) and financial reasons																												✓	✓						
	new regulations for behaviour of public sector institutions regarding their IP																														✓					
	but: fundamental problem of publicly funded research exploited for private benefit.																																			
	revised EU rules on collaboration in EU funded projects																																			
	revised EU rules on competition and collaboration regulations																																			
The changing roles and functions of Patent Offices																																				
	diffusion of knowledge from patent databases																														✓					
	increasing awareness of the importance of IPRs - publicity and training																														✓	✓				
	EU integration/recognition																																			
	pro-active role of patent offices																																			
Specific public measures to assist companies (especially SMEs) in acquiring IPRs.																																				
																															✓	✓	✓	✓	✓	✓

## List of Templates related to IPR

Country	Instruments	Date	Description (from overview of template/datasheet)	Modality of operation	Targets
Austria	AT_16 Technologiemarketing Austria (TecMa)	1998	TecMa was established to promote commercial applications for intellectual property developed by Austrian scientists. TecMa locates industrial partners, provides financial assistance during the patenting phase and offers consulting services with regard to the exploration of R&D results.		Scientists at universities and research institutions; private inventors
Austria	AT_19 FWF Impulse Projects (1997-2000)	1997	Impulse projects are designed to improve the transfer of knowledge between Austrian universities and industry as well as to stimulate R&D in the business sector. The Federal Ministry of Science and Transport (BMWV) bears the cost of employing a Post-Doc scientist for at least a year. An additional goal is to help young scientists to get in touch with corporate R&D.		Young scientists SMEs.
Belgium	BE_5 PIIE - Office for Industrial Property	N/K	PIIE delivers various services around the information on patents, trademarks and models. PIIE has the following mission: Favour industrial property protection Promote the interest of enterprises active in Belgium in the field of IPR Administer demands for national, EU and international patents Deliver Belgian patents Diffuse the information related to IPR and notably the technical information contained in patents Represent Belgium' position in international bodies dealing with IPR. In the context of innovation support, and beyond the traditional role of administering IPR, important roles of this service are, first, to open access to the sources of technical and strategic information contained in patents, to the large public of economic actors, and second, to conduct awareness-raising activities in the field of IPR.		Large Companies/Large Industrial Companies Research Institutes SMEs/Industrial SMEs
Belgium	BE 10 Support for immaterial investment	N/K	The economic expansion laws, modified by regional decrees, organise the possibility for regional governments to grant subsidies to enterprises that carry out investments in the region. Besides material investments for the running of the actual activity of the company, of particular interest to innovating enterprises is the possibility to obtain subsidies for immaterial investments in relation to future activities of the companies. The types of immaterial investment covered are: -Market studies, studies for the commercialisation of new products -R&D for new products,		???

			<p>processes, and the development of prototypes -Acquisition of patents, trademarks, property rights -Investment in quality management Investment for training and education. The rules for the subsidies differ according to the sector of activity, the type of financing, and the nature of the enterprise (starter, existing enterprise, enterprise created by a young entrepreneur). Eligible enterprises should have maximum 40 employees (for commercial enterprises), 50 employees (for other enterprises), and 70 employees in some specific cases. The amount of the subsidy is expressed as a percentage of the investment programme costs. An increase in the subsidy is granted if the investment is considered has having important economic impacts on the region. The rate of support varies between 9% (basic rate) and 24% (rate for the starters) of the investment programme. There are some sectoral restrictions for the support, and the intervention can only be granted for investments of a certain size.</p>		
Belgium	BE_18 (VI) University Interfaces (1998-2001)	1998	<p>The Flemish government supports the interface activities of the universities, for the following activities: -Stimulation of co-operation between university and industry - Promotion of the creation of spin-off companies - Valorisation of research results in industry - Dealing with IPR in universities. The Flemish government devotes a yearly budget of 50 Mio BF for this support.</p>		Universities
Denmark	DK_10 IPscore®	2000	<p>IPscore is a management tool that can be used by companies to manage and evaluate their patents and trademarks.</p>		<p>Large Companies/ Large Industrial Companies Public Authorities/ Organisations SMEs/ Industrial SMEs</p>
Finland	FI_10 Technology transfer from universities and research organisations (1999-2001)	1999	<p>Enhance transfer of technologies from universities and research institutions to the market place; build best practices to all Finnish universities and to the university-industry interface; concentrates on identifying, evaluation, commercialisation and licensing of novel innovations.</p>		<p>Public Authorities/Organisations Universities</p>

Germany	DE_6 Erfinderförderung at the Patentstelle Deutsche Forschung/Inventors aid at the Patent Office German Research	N/K	The Fraunhofer Patent Office of German Research offers state loans for innovative inventors in order to support them receiving a patent for an invention. The main aim of this measure is to support the commercialisation of patents with a high market potential. The Patent Office also helps to market and sell the new product. Prerequisites are a technical realising ability and a high degree of economic value. Support may also be provided for prototypes and models.		Individuals Researchers SMEs/Industrial SMEs
Germany	DE_7 Patentinformationszentren / Patent Information Centres	N/K	The program allows SMEs to have access to scientific and technological information that are essential for innovation management in companies. Therefore has been set up a nationwide network of patent-information-centres. The patent-information-centres offer various types of support/subsidies: · Access to original documents and support of the companies' own information search · Copies of patent documents and other papers · Free consultation of patent agents · Lectures on the services of the patent-information-centres (at cost) · Some patent-information-centres are entitled to examine patent applications		N/K
Germany	DE_8 INSTI KMU Patentaktion / INSTI SME patent initiative	1996	The measure has four major goals: <input type="checkbox"/> Reduce barriers in SME with respect to the use of patents as information source and an instrument to protect property rights, and to improve the innovation capability of SME <input type="checkbox"/> Increase the number of qualified patent applications by SME <input type="checkbox"/> Improve the use of patent information by SME <input type="checkbox"/> Improve the conditions at SME for the commercialisation of patents		SMEs/Industrial SMEs
Germany	DE_18 Fraunhofer-Patentstelle für die Deutsche Forschung - PST Fraunhofer Patent Office for German Research	N/K			Individuals Research Institutes Researchers SMEs/Industrial SMEs
Greece	2-GT_34 Law 2697 "Certify of Locarno's settlement for the International classification of the Industrial Design and Models - Athens, March 31, 1999.	1999	By this Law it is adapted the international classification for the industrial plans and patterns. The international classification includes: - A catalogue of the categories and sub-categories. - An alphabetic catalogue of the products in which plans and patterns are embodied - Clarifications Countries which adapt the above law compose a Specific Union.		Large Companies/Large Industrial Companies SMEs/Industrial SMEs

Greece	GR_1 Investment Law - Promotion	1990	The main goals of the new general development law are the attraction of investment activities in industry and tourism, the efficient networking of new incentives for investment in order to create employment, the promotion of a healthy environment for competition and to support convergence of the Greek economy with that of the other EU States. In particular for the case of IPR, the law will support expenses for the creation of a prototype of an invention that has been registered in the Greek patent office, expenses for the international registration of the invention, expenses for the renewal of the international registration for five years (if industrial investment takes place which is more than ten times the level of expenses for the registration).		Large Companies/Large Industrial Companies SMEs/Industrial SMEs
Greece	<b>GR_42 Awards and Financial Support for Inventors</b>	2000	Awards will be awarded to Greek citizens' outstanding inventions, in order to reward inventors for their contribution to technological development and to diffuse inventions to the larger public. Financial support will be given to inventors, to cover registration costs for industrial property rights or to cover costs for participation to international conferences or exhibitions.		Researchers
Iceland	IS_2 Committee on Intellectual Property Rights	1998	A temporary committee on intellectual property rights, and more particularly patent protection activity of the Icelandic technological society has been set up. The main goals of the committee are twofold: Investigate what the reasons are for very poor results by the nation with regards to innovation measured by number of patents issued per capita. Put forward suggestions for how the patent activity/awareness of individuals, industry and educational and research institutions. The background for this work is very poor results of Icelandic citizens, industry and institutions with regard to number of patents issued per capita. The average number of issued patents have been little less than two per year total per 280,000 inhabitants. This appears to be 10 – 20 times less than how our comparing nations score. As OECD and many others use this measurement (number of patents issued to national inhabitants) at least as one measurement of the R&D activity, the Ministry of Industry and Trade is concerned about this. The first preliminary report of the committee is expected to be released in October/November 1998.		Export industry, especially the high-tech sector. R&D institutions and higher educational institutions

Ireland	IE_6 Protection of Copyright - Copyright Bill	To be enacted	To regularise the protection and licensing of IPRs in software and other copyright material on the Internet and other media.		Internet-based companies and individual authors
Italy	IT_28 Decree 3 December 1999 concerning the definition of both the conditions of admission and the general rules for the administration of the Guarantee Fund for SMEs ex art. 2, comma 100, letter a), of Law 23 December 1996, no. 662 (purchasing of patents, licences and technical know how)	1999	The Decree specifies both the conditions of admission and the general rules envisaged by Article 13, Comma 2 of the Decree issued by the Ministry of Industry together with the Ministry of Treasury no. 248 31 May 1999 for the administration of the Guarantee Fund for SMEs ex art. 2, comma 100, letter a), of Law 23 December 1996, no. 662. The Fund can cover the expenditure linked to the technology transfer activities through the purchasing of patents, licences and technical know how.		SMEs/Industrial SMEs
Luxembourg	LU_3 Technology Watch Centre	1994	The CVT started its activities in 1994 as a pilot project under the initiative of the Intellectual Property Division of the Ministry of Economy and in close collaboration with the European Patent Office. In 1996, the public research centre Henri-Tudor established the CVT as one of its departments. The CVT's main objectives are increasing awareness of national and regional companies to the growing importance of industrial information and assistance in setting up their information management process. The CVT assist national and regional companies in searching, gathering, treating, analysing and managing scientific, technical and technico-economical information.		Large Companies/Large Industrial Companies SMEs/Industrial SMEs
Norway	NO_17 Assistance – Applications for Patents in Norway and Abroad – In Development/Prototype	N/K	The objective of the measure is to facilitate and encourage independent inventors and SMEs in applying for patent in Norway and/or abroad (as well as assistance in development/prototype).		Individuals Large Companies/Large Industrial Companies SMEs/Industrial SMEs
Portugal	<b>PT_16 Company Modernisation Incentive System (SIME)</b>	2000	Promotion of company development, by supporting modern and competitive company strategies, and stimulating strategic competitiveness factors, namely in the areas of internationalisation, innovation, quality, environment, energy and upgrading of human resources skills.		Large Companies/ Large Industrial Companies SMEs/Industrial SMEs

Spain	ES_1 CDTI Financial Support	1978	<p>The ‘Centro para el Desarrollo Tecnológico Industrial’ (CDTI) (Centre for the Development of Industrial Technology) is a Public Business Institution dependent on the Spanish Ministry of Industry and Energy that promotes innovation and technological development achieved by Spanish companies. Since 1978 CDTI has as its purpose to encourage industry competition in Spain by developing the following activities: · Technical-economical assessing and funding of R&amp;D projects developed by companies · Providing support for Spanish involvement in international R&amp;D programmes · Promoting international technology transfer and providing support to technology innovation. Due to its legal person condition, CDTI is ruled by private law in its relationships with third parties. This puts CDTI in a position to offer fast activity and flexibility in its support services for the development of business R&amp;D projects, exploiting technologies developed by the company at the international level, and offering technological-industrial supplies to national and international scientific and technological organisations. Consequently, CDTI grants companies its own financial aid –and eases access to third parties– for research and development projects both at the national and international level. CDTI also gives support to companies for exploiting, at an international level, technologies developed by them. For this, CDTI Technology Promotion Projects, its outside network of offices and representatives, and the Iberoeka projects. Finally, CDTI manages and supports Spanish companies fulfilment of industrial contracts with a high technological content generated by different national and European organisations such as the European Space Agency (ESA), European Laboratory for Particle Physics (CERN), European Synchrotron (ESRF), Hispasat and Eumetsat. CDTI assesses and finances R&amp;D projects developed by companies – regardless of their activity field and size. The budget for projects financed by CDTI usually ranges from 40 to 250 million pesetas approximately. This amount includes fixed assets (laboratory, pilot plant, etc.) staff working in the project, equipment, and other costs involved. Any Company having the technical capability to develop a Technology Research Project, Technology Development Project or Technology Innovation Project and the financing capability to cover 30% of the total budget for that</p>		Large Companies/Large Industrial Companies SMEs/Industrial SMEs
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			<p>project with its own resources, can obtain financial aid granted by CDTI as credits. Financing offered by CDTI consists of interest-free credits, which cover up to 60% of the total budget for the project. CDTI only supports projects that are technically and economically feasible, but it does not require real guarantees for granting these credits. This financing comes from the Centre's own resources, resources of the R&amp;D National Fund and the European Regional Development Fund (ERDF). From 1978 to 1995 CDTI financed projects for a total amount of 450,000 MPtas, with a CDTI contribution of 170,000 MPtas. 57,000 MPtas had been paid back by the end of 1995. The CDTI contribution for the technology development of companies is 9,495 MPtas for the period 1994-1999.</p>		
Spain	ES_19 INFO XXI: The Information Society for all (2000- )	2000	<p>INFO XXI is an strategic initiative o the Spanish Government aimed at implementing Information Society in Spain, in order that its citizens and enterprises can take part in its development and take advantage of its potential to improve social cohesion, quality of life and work and economic growth.</p>		<p>Individuals Public Authorities/ Organisations Researchers Students in upper secondary schools</p>
UK	UK_12 In-house presentations to larger companies to raise awareness amongst businesses		<p>Part of UK Patent Office's marketing strategy Visits delivered by Patent Office marketing executives to companies identified by in-house marketing database and support team. Addresses lack of knowledge of IP in UK companies; in particular loss of competitiveness of UK companies in international markets because of ineffective use of IPR and lack of coherent IP policy.</p>	Awareness and training	larger companies
UK	UK_13 Intermediaries' Workshops		<p>Part of UK Patent Office's marketing strategy Ultimately a development of 1/2-day and one-day training courses for industrial liaison officers in universities, company staff and Business Link personnel and of the public Roadshows which were aimed directly at decision makers in SMEs. The present approach involves training business advisers who act as multipliers in giving advice to companies.</p>	Awareness and training	<p>general business advisers, in particular Business Link staff, solicitors, accountants and bankers but not professional IP consultants such as patent and trade mark agents.</p>

UK	UK_14 Project with Bournemouth University		Part of UK Patent Office's marketing strategy. Distance learning/awareness package for students	Awareness and training	UK undergraduates across many disciplines : science, technology, engineering, law, business, etc.
UK	UK_15 Projects with Association for University Research and Industrial Links (AURIL)		Part of UK Patent Office's marketing strategy. Carries forward previous work with industrial liaison officers (ILOs) in universities (lectures, training courses) at a more strategic level. Three levels: creation of materials to educate/assist ILOs; creation of section for use by AURIL members on Patent Office Website; assessment of IP policies in UK universities leading to the establishment of guidelines	Awareness and training	Industrial liaison officers and others involved in the commercial exploitation of IPR in UK universities
UK	UK_16 Work with PR Company		Part of the UK Patent Office's marketing strategy as set out in its Corporate Plan. The use of a specialised PR company to develop media material and to ensure its effective dissemination	improving the legal and regulatory environment in the UK.	Large Companies & SMEs
UK	UK_17 Central Enquiry Unit (CEU), Internet Website, Publicity Literature		Part of UK Patent Office's marketing strategy. Creation of a centralised service in the Patent Office to give general advice and information on all aspects of IP. Literature was originally unattractive but has been developed to be readable, informative and up to date	Awareness and training	Any enquirer but particularly lone inventors, companies and (for specialised information) IP professionals
UK	UK_25 Abolition of patent fees		Three main measures: Abolition of the patent application fee; Reduction of the costs of Patent Office services overall by 20 per cent; and Posting the patent application form on the Internet	Cost reduction	SMEs
UK	UK_33 Reform of the taxation of intellectual property		A Technical Note by the Inland Revenue. To consider the ways in which current tax rules relating to intellectual property maybe reformed, to make them simpler, to embrace all forms of IP and to simplify the arrangements for the taxation of royalty payments	Change in Taxation rules	
UK	UK_37 The Biotechnology Exploitation Platform Challenge (BEP		Aims to anchor the benefits of publicly funded bioscience research in the UK. Encourages syndicates of universities, academic institutions and intermediaries with complementary	pump priming for organisations providing	Biotech sector

	Challenge)		bioscience research to work together and build portfolios of intellectual property. In particular, it aims at securing the necessary skills to: audit existing intellectual property in bioscience departments in academic institutions and identify commercial opportunities by matching portfolios of intellectual property with potential industrial markets	information and advice in biotech exploitation.	
UK	<b>UK_45 V Intellectual Property (IP) Portal</b>	2000	The IP Portal is a gateway site on IP. Its intention is to generate an interest and awareness of IP. It provides users with basic facts and more detailed information. It is suitable for both novices and professionals alike. There are frequently asked questions, latest IP-related News and over 1000 links to Government and IP-related web sites. The Portal has been designed to evolve and be responsive to users by allowing them to nominate relevant sites they have found useful – thus contributing to the growth of the knowledge base.		Individuals Large Companies/Large Industrial Companies Managers Other Public Authorities/Organisations Research Institutes Researchers SMEs/Industrial SMEs Universities
UK	<b>UK_48 Database of Technology Offers</b>	2001	The project, due to be set up in Autumn 2000, but not yet realised, is intended to provide a clearing-house offering technology available for licensing across the university sector.		Graduates Large Companies/ Large Industrial Companies Managers Public Authorities/ Organisations Research Institutes Researchers SMEs/ Industrial SMEs Universities
Slovenia	SL_1 Young Researchers Program		rejuvenate the human capital in S&T, foster innovation and research		Graduates

## **6. Extracts from Country Reports December 2000**

### **AUSTRIA**

The protection of intellectual property rights was given little attention by Austria's policy-makers in the past. IPRs, as a general rule, belong to the employer, but universities showed in general little interest in exploiting their research results, exceptions being institutes with joint-research activities. The only measure with regard to IPR is the TecMa initiative (AT\_16) carried out by the Innovation Agency. Its goal is to support scientists applying for a patent and promote the exploitation of their inventions.

### **BELGIUM**

The Federal government remains responsible for the management of the Belgian patent system. An effort is made by the Federal Office for intellectual property rights, to go beyond its traditional role of administering patent applications, so as to develop a pro-active awareness-raising campaign about the importance of patents. A recent policy note by the Federal Minister for Economy reiterates the intention of the government to improve the protection and exploitation of IPR in Belgium. A series of proposals is identified including: the reduction of the legal insecurity by the application of a "grace period" allowing the author of a publication to request a patent; changes to the law of 1984 concerning the patents on inventions by employees allowing a legal entity to request a patent on behalf of an employee (with provisions for the remuneration of the employee); measures to reduce the cost of patenting (research tax reduction, etc.); on-line filing of patents; provision of additional personnel for Federal funded research centres and university interfaces to carry out prospective analysis in high technology sectors.

At the regional level, the various governments have taken steps to encourage researchers and companies to apply for patents and protect their research results. The Flemish government funds interface structures universities with the aim of ensuring, amongst other activities, the commercialisation of research results and IPR protection in universities.

The Walloon government has also taken a series of steps to increase awareness of and encourage the protection of IPR, notably patents. The measures have been taken in order to stimulate the exploitation of research results by universities include the granting of IPR rights to Walloon Universities and institutes of higher education for the results of R&D programmes financed by the Walloon government; the reimbursement of patent application costs to universities resulting from research projects financed by the region; the reinforcement of university-industry interfaces with specialised personnel able to advise in matters of IPR and patents.

In addition, the acquisition of patents or technology licences by firms is supported by several tax or grants/loan schemes as part of R&D project. Technology watch and patent search services are provided by a number of organisations and also by the technological attachés of the collective research centres.

## **BULGARIA**

The Law amending and supplementing the Copyright and related rights Law, which entered into force in May 2000, implements all requirements included in the Directives of EU in the field of copyright and related rights with the exception of database makers. In addition, the Law introduces measures in respect of border control to commodities infringing copyright and related rights. Effective protection has been enhanced for the copyrights included in the broadcasting programmes through measures towards limitation of illegal use of broadcasting programmes. Licensing regimes, which have been introduced since 1997 for the producers of CDs and moulders (for the manufacturing) are other measures in the area.

With the amendments in the field of trademarks and industrial design made in mid-2000, the protection of the trademarks has been increased to 25 years.

In October 2000, the Government approved and proposed to the Parliament the ratification of World Organisation of intellectual property two treaties, the treaty on copyrights on computer programs (software) and data bases and the treaty dealing with the protection of the rights of the artists and producers of performance on sound records.

## **CYPRUS**

The Cypriot patent law was adopted in April 1998 (Law Nr. 16 (I) 98), which is of specific interest for the RTDI environment [CY\_4]. A recent amendment under No. 21(1) of 1999 has entered in force since 19.3.1999. As Cyprus has recently joined the European Patent Convention and the law is compatible with most European Patent norms, no harmonisation problems are expected in this area. Up to 1997 patents of Cypriot origin have been mostly registered under the UK patent system.

## **THE CZECH REPUBLIC**

The framework as yet does not exist. The Czech Government has not formulated an explicit policy on innovation fostering.

## **DENMARK**

In this area one new innovation support measure relevant to the Trend Chart has been launched (DK 10: IPscore).

A working party within the Danish patent and Trademark Office has completed a project developing a generic model for evaluation of patents and trademarks. The method will provide companies with better control of their IP portfolio and allowing them to use the rights actively as part of their general business strategy. The analytical report from the working party was presented at a workshop in January 2001. The tool is called IPscore® and can be accessed at the Internet site [www.Ipscore.dk](http://www.Ipscore.dk).

Also the Government has prepared a plan aiming at the establishing of courses within IP on all universities and higher education centres.

In November 1999 the Government launched a report on intellectual property, in which it presented its strategy on IP protection. The strategy has three elements:

- The prospect for protection of IP must progress with a view to development in technology and the international development in general.
- The international harmonisation of the legal basis for protection of inventions, trademarks and designs must be accelerated
- Possibilities for swift and cheap protection must be guaranteed.

In continuation of the strategy some adjustments in the legal basis has been initiated:

- In May 2000 a Bill was passed to implement part of Directive 98/44/EC on legal protection of biotechnological inventions.
- In June 2000 Denmark Signed the Patent Party Treaty, and in October 2000 the Government passed the so-called Designer Bill – coming into force October 2001 – which implements the Designer Directive (98/71/EC).

In continuation of the Governments business strategy a project aiming at improving companies and researchers access to patents databases has been launched. The intention to facilitate that all Danish patents and utility models can be accessed one place, and that all information related to patents will be assembled on a CD-ROM/DVD. Also an Internet based database will be developed. The project will run to the end of 2003.

## **ESTONIA**

In Estonia, patent applications are not supported by governmental funding, like for instance in Finland, where a special fund for financing patent applications and providing expert evaluation has been set up. Recently, the Utility Model Act was amended to protect innovative solutions through a more simplified procedure than those for seeking a patent do.

The Estonian government has, however, devoted serious attention to copyright protection in the area of software, including legalisation of the programmes that the government uses. Purchasing agreements for software for government agencies (at special terms), have been signed with major vendors such as IBM-Lotus, Informix, Microsoft, Novell, Oracle, Progress and Sybase. The amount of illegal software used in government agencies has decreased to about 10% of all software in use.

## **FINLAND**

Following increasing attention drawn to issues related to IPR, especially in the university sector, the Ministry of Education assigned a committee (the Lindqvist committee) to map the problems and prospects that researchers are facing in this field. The basic recommendation of the committee was that the level of competence in IPR-issues and exploitation of research results more generally, should be enhanced at the universities and the Academy of Finland. More specifically, a change in the laws governing IPR was recommended, which would essentially give the same rights for researchers and lecturers at the universities and equivalent to those enacted in private sector firms (The Ministry of Education 1998).

In 1999 the Ministry of Education appointed a working group for the implementation of the recommendations provided by the Lindqvist committee. Since then, one

concrete measure has already been enacted, relating to the transfer of technologies from universities and research organisations to the market. The focus is on licensing and the management of IPR at the universities (FI 10).

In 1998 an international evaluation was conducted on the promotion of independent inventions and their commercialisation (Zegweld et al. 1998). This evaluation gave the recommendations of the Lindqvist Committee additional support. Among other things, it was recommended that there should be more coherence and networking between the organisations involved in the promotion of inventiveness/innovation – Tekes, Sitra as well as the Academy of Finland – and that inventors and research organisations (including universities) should be given the full responsibility of their inventive activities, including the commercialisation of research results. The costs of these activities should form an integral part of the costs of research. It was also envisioned that supporting organisations, also in the private sector, should have a more important role as providers of high value added services in matters related to IPR.

## **FRANCE**

During the first semester of 2000, the filing of French patent by French companies was still increasing, but with a limited rate of 1,5%. In parallel, there is a high increases of filing European patents by French companies (+ 8%).

If we take into account the sectors of patent, it is of interest to note that computing, telecommunications and biotechnology now represent 37,3% of the whole number of new patents.

## **GERMANY**

Fostering the use of intellectual property rights is addressed in German innovation policy both in the field of legislation (IPR regulation) and via promotion programmes. In recent years, there was a debate as regards usefulness of the “Hochschullehrerprivileg” (the exclusive right of university professors to commercialise their inventions). An increasing number of stakeholders argues that an efficient commercialisation of university based demands a change in current regulation. Professors should be urged to inform the university about inventions made. The right of using inventions and parts of the income out of licenses should be transferred to the university administration. Moreover, some argue that Germany should seek to re-introduce a newness clause which allows publication of inventions made in scientific journals without destroying the ability to apply for a patent later.

On October 30<sup>th</sup> 2000, the joint Commission by the Federal Government and the Länder on Education Planning and Research Promotion (BLK) decided to change IPR regulation for universities. Researchers will lose their executive right on inventions while university administrations get the right to commercialise inventions made by university researchers. In future, university professors should receive two thirds of licensing incomes compared to 100 per cent today. Effective changes in the respective law (“Arbeitnehmererfindungsgesetz”, § 42) are expected to take place in 2001.

Furthermore, several industry managers argue that the German “Arbeitnehmererfindungsgesetz” (law which guarantees a certain part of the profits

from invention to the inventor even if the invention is made on the job) is counterproductive in stimulating inventions in large corporations.

There are various promotion programmes to strengthen the use of intellectual property rights by industry, university and public research organisations:

The Fraunhofer Patent Office of German Research (DE\_18) offers state loans for innovative inventors in order to support them when receiving a patent for an innovation. The Patent Office also helps to market and sell the new product. Prerequisites are a technical realising ability and a high degree of economic value. The form of support is presented as a state loan without interest requirements. The loan has to be repaid only in case of revenues. Marketing of the product is carried out by the Patent Office only and in case of success the Office is entitled to receive a quarter of the revenues.

## **GREECE**

No changes were observed in the framework conditions. The Organisation for Intellectual Property has launched a new measure, whereby it will offer awards to inventors in 8 sectors, living conditions, manufacturing techniques and transport, chemistry-metallurgy, textile-paper industry, construction, mechanics-ammunition-heating, physics and electricity (GR\_42).

## **HUNGARY**

Participation in the 5<sup>th</sup> EU Framework Programme (HU\_06, HU\_07) ensures that the protection of intellectual and industrial property is handled with more importance.

## **IRELAND**

Software piracy continues to be an area of concern for the main software producers, many of whom have Irish-based production plants. This appears to be a particular problem in a “small country” context, with people being afraid “to inform” on their employers and colleagues.

## **ISRAEL**

The Law for the Encouragement of Industrial R&D (IL4) is being revised by a high-level interministerial committee. Companies will be allowed, subject to certain conditions, to transfer abroad know how acquired through government funding, after reimbursing the government on the basis of the know how value at time of sell or on its contribution to the company price in case of company sell-out.

US-Israel science and Technology Commission authorised a program in harmonization in the field of intellectual property, to include but not be limited to seminars and training with a goal of equal and mutual treatment and recognition of patent and other intellectual property rights in both countries.

TNUFA – Start-up Promotion Program is designed to give momentum to promising entrepreneurs determined to develop start-up companies. The assistance portfolio provided by TNUFA includes Patent Search and funding for patent filing.

R&D projects supported by OCS through the Law for encouragement of R&D are entitled for funding of patenting expenses.

Recently, the government is making strong effort to enforce intellectual property rules, especially those pertaining to software and music.

## **ITALY**

The new Agency for the Industrial Property (envisaged by the Bassanini Law) is going to be implemented (*see the White Paper of the Ministry of Industry*)

## **LATVIA**

In Latvia, intellectual property rights are regulated by:

- The Patent Law (1993)
- The Trademark Law (1993)
- The Law on Industrial Design Protection (1993)
- The Copyright Law (1993) which included provisions for computer programme and data base protection
- The Law on the Protection of Plant Varieties (1993)

In 1992, the Government adapted a decision on the provisional (transitional) schedule for the protection of industrial property rights (as outlined above). In 1993, Latvia joined the convention Establishing the World Intellectual Property Organisation, re-established its membership of the Paris Union by way of accession to the Stockholm Act of the of the Paris Convention for the Protection of Industrial Property, and acceded to the Patent Co-operation Treaty. In 1994, the Government signed an agreement with the European Patent Organisation “On the Extension of European Patents to Latvia”.

In 1992, Latvia re-established the National Patents Office in order to ensure that industrial property rights are granted and protected. In 1993, a special institution was established for the purpose of granting rights in the field of plant variety protection. The Law on Amendment to the Latvian Criminal code (of 1995) provides for criminal liability in the case of violation of copyright and associated rights.

The preparation of legislative acts for the protection of intellectual property is the responsibility of the Parliament, the Cabinet and the European Integration Bureau within the Ministry of Foreign Affairs. The National Patent Office and the Ministry of Culture are responsible for the realisation of these acts.

Research and Technology Development (RTD) co-operation with third countries and international organisations INCO-COPERNICUS (INCO) –Latvia participates in the process by putting forward objectives:

1. To safeguard the scientific and technical potential of these countries.
2. To contribute to the solution of their major economic, social and ecological problems.

3. To intensify co-operation in RTD with these partners in their fields of excellence.
4. To strengthen the links with associated CECs as regards their accession to the EU.

## **LIECHTENSTEIN**

No measures concerning IPR

## **LITHUANIA**

No specific measures address this objective. Copyright and patent laws ensure the protection of intellectual and industrial property.

## **LUXEMBOURG**

At the beginning of 1996, the Ministry of Economy, which incorporates the Industrial Property Directorate (which promotes protection, issues national patents and manages national, European and international applications) started a pilot project with the Henri Tudor PRC involving the creation of a technological watch centre whose main objectives are:

- provision of technological and industrial property documents and data bases for consultation purposes;
- supporting the activities of the intellectual property department of the Ministry of Economy;
- awareness of companies (mainly SMEs) as regards the need for technological watch and intellectual property protection;
- development of strategic information processing and analysis tools (data processing);

The technological watch centre recently became a permanent resource centre of the Henri Tudor PRC and assists companies in reaching strategic decisions that may lead to forms of innovation. (template LU-3)

## **THE NETHERLANDS**

Dutch policy aims at making IPR's (and especially patents) better known as an instrument to help stimulate innovation. The use of patents is advocated not only as a means to protect new inventions, but also as a publicly accessible source of technical knowledge. By implementing a Strategic Plan the Netherlands Office for Industrial Property is actively approaching a specific number of target-groups in order to get them more involved with the patent-system. A recent study commissioned by EZ showed that most Dutch universities hardly have a pro-active strategy for IPR and exploitation. The property rights are with the universities but in cases of industrial interest, very often rights are transferred to the industrial partner. The study concludes that universities could make more use of patents. EZ has announced increased attention for encouraging IPR policies in universities.

Experiences of the Technical University Delft and foreign universities show that patents can be an effective means for encouraging the industrial application of public

knowledge. Together with OCW, EZ is currently analysing what policy conclusions can be drawn from these experiences.

With respect to the protection of industrial property, the National Office for Industrial Property has been encouraged to improve its services through: an on-line Patent Information System Participation in a European network with similar organisations (Message based Industrial property Information Exchange); more active marketing strategy and IPR training services; a SME customer survey to analyse their needs. The conclusion is that while the consciousness of IPRs and their importance is growing, there seems to be not structural and systematic use of the patent system available to companies yet.

## **NORWAY**

In the Government White Paper on Research (St. meld. nr. 39 1998–99) the previous government expressed the need to ensure a more effective commercialisation of university and college R&D. On January 28 2000 it appointed a special commission (“the Bernt Commission”) that is to suggest instruments and regulatory reform that might stimulate a more active industrial utilisation of university and college research. The report is expected soon.

## **POLAND**

The weakness of the Polish document is the fact that it appeared to be merely a set of wishful thoughts and general ideas without action plans. Nevertheless, the White Book stressed that "the preparation of Poland to a full membership in the European Union in the field of science and technology is not an easy task". Politicians finally started discussions on the list of necessary measures specified in White Book.

The implemented reforms are also likely to outline new laws on patents and trade marks, the adoption of laws on competitiveness and public support to enterprises according to EU standards, and finally to outline the economic strategy up until EU accession.

Poland has a relatively low number of patent applications, compared to the EU. The main reasons are deterring bureaucratic procedures, relatively high fees charged for application and a low number of application paths. Poland does not have access to the RE and RPE procedures, which are the main vehicles used in European patent applications. For instance, in Poland, in 1995 only 22,089 patent applications were filed and in Spain (i.e. in a country of a similar potential) 71,251 applications.

However, comparisons of GERD (total R&D expenditure) with the number of patents granted within a given country yields surprisingly good results for Poland. For one patent granted to Polish residents in 1995, GERD amounted to \$ 0.967bn (PPP). The comparable figure for Spain was \$8.015bn (PPP).

At present, policy makers do not realise the value of an efficient patent system to the innovation potential, which could be stimulated by a simplification of the patent system (simplification of application and patenting procedures and decreasing or abolition of application fees).

For trademarks and copyrights the situation is more satisfactory. The latest legislation has considerably strengthened copyright protection in Poland and has contributed to curtailing piracy.

The law on protection against unfair competition protects Polish and foreign companies from such activities as:

- Attempts to convince the public that the goods or services originate from elsewhere than the true producer or supplier.
- Damaging the company image by providing unchecked information or publishing its trade or technological secrets.

## **PORTUGAL**

Following its reorganisation (see PT-14), the National Institute for Industrial Property (INPI) seems to be more active and flexible, with a more pro-active role. An article by two members of the INPI Board at INPI review defines a broad vision for creating partnerships with a view to promote a favourable environment to use industrial property mechanisms<sup>4</sup>. Such partnerships should involve four main types of actors: the INPI; technology and business services inter-face organisations; industrial property agents; and companies. Implementation of this vision will, most probably, take place under the purview of the POE framework for partnerships and public initiatives.

There are two other measures in POE with a bearing on industrial property. SIME, the Company Modernisation Incentive System (PT-16) defines as eligible expenditures those concerning “the acquisition of patents, licences of exploration and technological knowledge, patented or not”, in the context of investment projects, and namely “investments in innovation and technology”. Additionally, under the purview of POE Measure 2.2. (Mobilising new ideas and new entrepreneurs), an incentive system for encouraging the use of industrial property mechanisms is envisaged. It is addressed to support either national or international patenting, as well as the design and implementation of prototypes or experimental premises based on patents already granted. Such an incentive system is not yet into force. It is expected to be published later this year.

## **ROMANIA**

The Governmental Decision 58/1998 that provides the legal framework for the protection of intellectual and industrial property was elaborated by the National Agency for Science, Technology and Innovation and the Agency for Intellectual and Industrial Property protection.

The State Office for Inventions and Trademark (OSIM) is the first Romanian institution that will be integrated into the EU. Taking into account that the foreseen legal form for the new European Patent System adoption is in fact a regulation under the European Union Treaty and the fact that Romania, as a candidate, has already started the negotiations with the EU, and, therefore, has to assimilate the “community

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<sup>4</sup> José Mota Maia and Jaime Andrez, “A promoção da inovação através de dinâmicas parcelares de promoção em rede”, *Jornal do INPI*, Vol. XV, nº 3, June 2000, pp. 5-7.

acquis”, as well as the fact that Romania is going to become a full member of the European Patent Convention starting the 1<sup>st</sup> of July 2002, the subject is of a central importance.

## **SLOVAKIA**

No measures have been announced within this category.

## **SLOVENIA**

The Slovenian Intellectual Property Office (SIPO), part of the Ministry of Science and Technology, continues to be in charge of industrial property, including the protection of patents, industrial designs, trade marks, copyright and related rights, and the collective administration of authorship and is signatory to all important international agreements in the field of intellectual property.

## **SPAIN**

The Spanish Patent and Trademark Office has established a *Forum for Innovation and Patents* for informal discussions, consults and opinion creation in the field of patents and innovation. This Forum has recently approved a programme aimed at improving, disseminating and increasing the patent system utilisation (8<sup>th</sup> November 2000). Among the measures, it can be mentioned: decrease times for evaluation, specialisation of judges, free services on internet, broad dissemination of the patent system among Business Schools and Universities, to intensify awareness among SMEs, to disseminate the importance of patents as technological information documents.

More accurately, commercialisation and exploitation of technological innovation is also a priority in the IV NP. The Spanish Office for Patents and Trademark (OEPM) (dependent agency of MCYT) has carried out a big effort in diffusion activities and try to spread the Industrial Property culture in all sectors of Spanish industrial scene.

This Office (OEPM) is also an excellent example of how Public Administration could benefit from Information Technologies bringing better services and information to citizens.

The S&T Minister have announced novelties for the near future in this field. Updating to our international context is one of the main objectives of the Industrial Property Regulation. In this sense a draft law, under study, will modify the actual Industrial Property Law, adding the European regulation of Biotechnological Innovations to the Spanish law.

## **SWEDEN**

Swedish law allows higher education institutions researchers to keep the ownership of patents. This constitutes an exception from the general regulation on patents on ideas developed by employees. This feature has been under debate for some years for several reasons. The case for passing ownership rights to higher education institutions is based on the argument that this would give universities an incentive to become more active in promoting commercialisation of research results, and that universities

as organisations are better equipped than individual professors to look after intellectual property rights.

Those advocating keeping ownership with individual researchers note that there is a potential conflict of interest between academic freedom of communication and economic efficiency. Here they argue first that professors should not be coerced into secrecy agreements etc. against their will, and in the case where a researcher chooses to commercialise results, the university should be able to monitor that he keeps a proper balance between academic values and economic efficiency, rather than being involved as a party in any transaction.

The issue of patent ownership in higher education institutions was raised again in the government research bill of September 2000<sup>5</sup>. Here, a new law implemented in Denmark from 1 January 2000 is highlighted. This law implies that the IPR from innovations belong to the researcher. However, the researcher has the obligation to inform the university of the fact that an exploitable innovation has been produced, and the university has the obligation to assess the technical and commercial potential of the innovation. After a negotiation, the university can choose whether to take over the IPR, against compensation to the researcher (which can be done without agreement with the researcher) or let the researcher exploit the innovation against compensation to the university.

A solution through collective agreement, based on the Danish model, has been discussed with the concerned labour market parties. However, in the above mentioned government bill, the government judges that such a solution is not currently feasible. The current conclusion of the government is to await evaluations of the Danish experience, which implies that no legal changes will be envisaged in another couple of years.

During the 1990s, Forskarpatent (Patents & Exploitation Offices) was set up in the major universities in Sweden to assist the researchers in the patenting and licensing processes (see also section 3.3). The Patents & Exploitation Offices supply consulting and training activities in IPR matters, evaluate technology disclosures from higher education institution staff for the commercial possibilities of the disclosures, apply for patents and license them to industry if possible.

## **THE UNITED KINGDOM**

The government has announced a new drive to support the links between research and innovation at PSREs (Public Sector Research Establishments). Although this is aimed more specifically at the general exploitation of research (Section 3.4), it is mentioned here as improvements in the handling of IP are also highlighted. This comes in response to one of the key findings of the Baker Report<sup>6</sup> on PSREs published by the Government last year. The key measures include: a consultation on new guidelines on IP ownership and management for government – the guidelines propose a general rule that research providers (like PSREs) should own the IP; changes to the Civil Service

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<sup>5</sup> Proposition 2000/01:3 Forskning och förnyelse (Government Bill - Research and Renewal)

<sup>6</sup> *Creating Knowledge-Creating Wealth: Realising the Economic Potential of Public Sector Research Establishments*. Published 1999. Available at [www.hm-treasury.gov.uk/docs/1999](http://www.hm-treasury.gov.uk/docs/1999)

Management Code so that scientists in the civil service will be able to benefit from helping to exploit their work commercially, for example through equity in spin-out companies; publication of new guidance on incentives for staff at PSREs<sup>7</sup>; and, to help bridge the gap in finance for seed investments, the Government will commit £10 million (€1.67 million) to a new fund for commercialising IP, aimed at PSREs including Research Council institutes and the NHS. The latter forms the cornerstone of an interdepartmental action plan (see previous Country Report) which sets out a range of measures to support PSREs in their mission to exploit the results of their work. The action plan is set out in full in the Government's response to the Baker Report<sup>8</sup>.

The benefits of using the Internet to manage IP better have also been recognised. An innovative project will be launched this autumn by the Association for University Research and Industry Links (AURIL), with a clearing-house offering technology available for licensing across the university sector, the Database for Technology Offers (UK\_48). The Government introduced a new IP portal in autumn 2000, designed to provide visitors with clear basic information on the full range of IPR and the part these play in protecting creativity and inventiveness. The IP Portal may be accessed at [www.intellectual-property.gov.uk](http://www.intellectual-property.gov.uk). It will offer a signpost to other sites with more detailed information for those who need it. The Intellectual Property Portal website (UK\_45), launched in November 2000, was developed by the UK Patent Office as a direct result of a report from the Intellectual Property Group of the Government's Creative Industries Taskforce. The Portal is aimed both at those who already have an understanding of IP and those who do not, by providing a range of access to specific detailed queries, frequently asked questions, and the latest news relating to IP issues. The Portal has been designed to evolve and be responsive to users by allowing them to nominate relevant sites they have found useful – thus contributing to the growth of the knowledge base.

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<sup>7</sup> Good Practice Guidance for PSREs and Staff Incentive Schemes (July 2000)

<sup>8</sup> *The Government's Response to the Baker Report "Creating Knowledge-Creating Wealth": Realising the Economic Potential of Public Sector Research Establishments*, Office of Science and Technology and HM Treasury, Cabinet Office. July 2000.