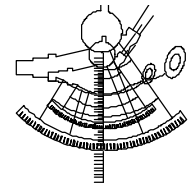
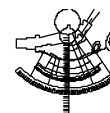


European Trend Chart on Innovation



Thematic Report IPR and Innovation

October 2002



Innovation is a priority of all Member States and of the European Commission. Throughout Europe, hundreds of policy measures and support schemes aimed 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 organisation 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 developing 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 organisation and scheme managers in Europe with summarised and concise 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, Iceland, Israel, Latvia, Liechtenstein, Lithuania, Norway, Poland, Romania, Slovak Republic and Slovenia. The Trend Chart website (www.cordis.lu/trendchart) will provide access to the following services and publications, as they become available:

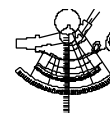
- a database of policy measures across Europe;
- a "who is who?" of agencies and government departments involved in innovation;
- a series of six-monthly country reports for all countries covered;
- a series of six-monthly trend reports covered on each of the four main themes;
- a number of benchmarking 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 **Paul Cunningham** and **Hugh Cameron**, PREST and **John Kyrtsoudis** and **Helene Luxembourger**, INBIS. The information contained in this report has not been validated in detail by either the Member States or the European Commission.

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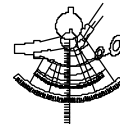
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Executive Summary

This report sets out to identify general trends within the activities of the EU Member States and Accession Countries in the field of Intellectual Property Rights (IPR) and innovation as part of the Trend Chart. The report covers the period September 2001 – October 2002. The report uses a similar framework of analysis to that used in previous reporting periods, particularly that set out in the Cameron report (2000)¹. It should be noted that this framework contains only information about the relationship between innovation policies and IPR, especially about policies that modify IPR conditions.

There is strong evidence that the EU member countries have recognised the importance of IPR on innovation and this is reflected in the new innovation policies and measures. These policies are treating IPR as a central pillar to successful innovation policy rather than as a specialised legal issue. Despite the time elapsed since the Cameron report (2000), a major policy trend can still be seen which recognises the important role IPR plays in innovative and competitive economies. Therefore the field of IPR continues to shift away from being “a rather specialised and often obscure legal discipline, even within companies”, towards the mainstream of innovation policy.

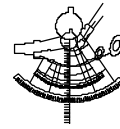
For consistency, the framework for analysis of the innovation support measures related to IPR programmes being used is similar to that used in previous reports. It is based on a classification according to the *modality* of the measure (i.e. its overall objective or mode of operation) and the *target* (i.e. the main group of actors to which the measure is directed and expected to operate upon/influence). The following modalities have been identified:

1. **Intermediation/development of cooperation:** agencies facilitating contact between different actors (investors, companies, research), grants to promote cooperation, website...
2. **Services/consultancy/training:** training/courses on IPR, help for registration, consultancy services, free or at low fares...
3. **Awareness raising:** awareness raising and explanation of the importance of patents for a company, increasing knowledge about IP in general, be it with students or companies
4. **Subsidies for IPR acquisition:** subsidies for companies making research with a view to finding innovating projects + to companies buying IPR
5. **Support for IPR development/registration:** subsidies or help (consultancy) for the registration of IPR, grants or reimbursement of patenting costs
6. **Promotion of IPR:** commercial advertising, organisation of events for promotion of IPR or innovation activities
7. **Legal framework:** improvement of the legal environment for IPR, new laws, new institutions or reorganisation of agencies, less bureaucracy, and so on.

Nine target categories have also been identified:

1. SMEs/industrial SMEs
2. Companies/industrial companies
3. Managers
4. Individuals
5. Research institutes and researchers
6. Students/graduates
7. Public authorities/organisations
8. Universities
9. Other.

¹ Cameron, H. *The European Trend Chart on Innovation, Thematic Report “Innovation and IPR”*, July 2000.



The analysis shows that governments have put most effort into improving the legal framework for IPR, followed by the establishment of IP intermediaries. The most direct approach – that of subsidising the acquisition of IP – is the least common modality. More recently introduced measures tend to focus on support for IPR development, awareness raising and the creation of intermediaries.

In terms of targets, 'industrial companies' forms the largest category, with SMEs representing the second largest category. Research Institutes and researchers, and Universities are also well represented. These results support the thesis that the issue of IPR is likely to be of greatest concern to the sources of IP (i.e. researchers in companies and in public research institutes, including higher education institutions) and hence these will form the major targets for Government intervention. More recent trends also support these conclusions.

In terms of IPR as a policy priority, in all groups of countries over the last three years the issue of IPR-related innovation policy has become much more important, relative to other policy areas. This underlines the general observation made above that IPR policy is becoming an integral part of the innovation policy portfolio. Similarly, IP-related innovation policy is increasing in importance, and in the Accession States is approaching the EU level.

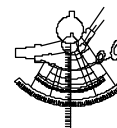
The report then presents a review of the qualitative information provided in the Trend Chart Country Reports (September 2002). This indicates a number of general trends which accord with the findings of the analysis of modalities. Overall, the general trends mirror those identified in previous reports in this series:

- a recognition of the importance of IPR issues in the broader field of innovation, and its corollary;
- increasing the awareness (and use) of IPR in innovation concerns;
- development and strengthening the IPR infrastructure;
- reform of legislation concerning IPR;
- introduction of specific public measures;
- promotion of collaboration between the public and private sectors.

In each category, a number of specific examples of measures in use in the Member States and Accession Countries are provided for illustrative purposes.

The report ends with a brief discussion of a number of general policy issues.

An annex presents relevant recent developments in innovation-related IPR support measures and actions as reported in the latest series of Trend Chart Country Reports (September 2002).



IPR and innovation

1. Introduction

This report sets out to identify general trends within the activities of the EU Member States and accession countries in the field of Intellectual Property Rights (IPR) and innovation as part of the Trend Chart. The report covers the period September 2001 – October 2002 and uses a framework of analysis similar to that used in previous reporting periods, particularly that set out in the Cameron report (2000)². It should be noted that this framework contains only information about the relationship between innovation policies and IPR and especially about policies that modify IPR conditions.

IPR is concerned with the protection of intellectual property. Intellectual Property can be owned by its owner and therefore it can be legally protected in the same way as with physical property. Intellectual Property Rights (IPR) grants inventors the right to own their creativity and innovation, to control its use and to be rewarded for it. Therefore, some form of protection is required to ensure that the inventor or owner appropriates the benefits. In general, companies have recognised that IP protection plays an important role in developing a competitive advantage, and therefore they treat IPR as an important element of their innovation management. This has helped public policy-makers to recognise intellectual property rights as an essential feature of a successful, innovative economy.

This is seen in the general public 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.

There is strong evidence that the EU Member States have recognised the importance of IPR on innovation and this reflects the new innovation policies and measures. These policies treat IPR as a central pillar to successful innovation policy rather than as a specialised legal issue.

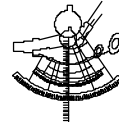
The Trend Chart also covers the Accession Countries which are currently negotiating their entry into the European Union. There are clear signs that these countries are beginning to treat IPR as a priority issue. These countries, many of which were former communist economies, are facing different economic challenges from the Member States, and this in turn puts pressure on their innovation policies and programmes. The biggest challenge they face in the field of IPR is to modernise their IPR legislation and to bring it in line with European and international legislation.

The economies of the European Union members are becoming more and more 'knowledge-based'. In knowledge-based economies, innovation is based more on the creation and transfer of knowledge. A key feature of knowledge is that, whilst in many cases it may be written down or embodied in concrete formats, etc. (codified knowledge), in many other cases it resides only in people's heads and is highly transferable (tacit knowledge). By its intangible nature, the protection of intellectual property poses new legislative and regulatory policy problems.

Another key feature of the new knowledge is that it is relatively expensive to produce, but may be copied easily and at a fraction of the cost. However, it can also be argued that, in order to capture new knowledge fully, economies must have developed their own absorptive capacity through the provision of trained scientific and technical personnel. Nevertheless, it is essential that, at all levels of innovation, the producers of knowledge should be able to devise forms of IPR policy to protect knowledge and new technologies. As stated by Cameron, "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-

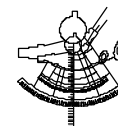
² Cameron, H. *The European Trend Chart on Innovation, Thematic Report "Innovation and IPR"*, July 2000.

European Trend Chart on Innovation



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.”

Despite the time elapsed since the report by Cameron (2000), it is still evident that there is a major policy trend which recognises the importance of intellectual property rights as an essential and integral part of innovative and competitive economies. As a consequence, as noted above, the field of IPR has shifted away from being “a rather specialised and often obscure legal discipline, even within companies”, towards the mainstream of innovation policy.



2. Framework for Analysis

Before dealing with an analysis of the innovation support measures, relevant to IPR, introduced by Member States and the Associated and Accession Countries, it is important to take note of the following warning.

In the area of innovated-related IPR issues, the problem of defining a 'support measure' is possibly more problematic than in any other Action Line. While the introduction of a new information dissemination mechanism, such as the UK's IP Portal (UK 45), can be clearly identified as a support measure, incremental processes (such as general changes to the operating conditions of the Patent Office, or the publication of advisory leaflets on IP) are harder to designate as such. Thus, it is possible that several IP support developments may be ongoing while they cannot individually (and also collectively) be considered to constitute a clearly defined support measure *per se*. Thus, while no specific measures may be reported for a country, this does not imply that lower level developments are not occurring.

For consistency, the innovation support measures related to the field of IPR programmes, as reported in the datasheets provided by the Trend Chart country correspondents, have been analysed using a framework similar to that used in previous reports on this topic³. This is based on a classification according to the *modality* of the measure (i.e. its overall objective or mode of operation) and the *target* (i.e. the main group of actors to which the measure is directed and expected to operate upon/influence).

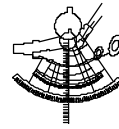
2.1 Modalities

The modes of action of the measures presented are derived from information provided in the datasheets. This information (datasheet section 1.3.c 'mode of delivery of action') provides the following seven categories:

1. **Intermediation/development of cooperation:** agencies facilitating contact between different actors (investors, companies, research), grants to promote cooperation, website ...
2. **Services/consultancy/training:** training/courses on IPR, help for registration, consultancy services, free or at low fares...
3. **Awareness raising:** awareness raising and explanation of the importance of patents for a company, increasing knowledge about IP in general, be it with students or companies
4. **Subsidies for IPR acquisition:** subsidies for companies making research with a view to finding innovating projects and also to companies buying IPR
5. **Support for IPR development/registration:** subsidies or help (consultancy) for the registration of IPR, grants or reimbursement of patenting costs
6. **Promotion of IPR:** commercial advertising, organisation of events for promotion of IPR or innovation activities
7. **Legal framework:** improvement of the legal environment for IPR, new laws, new institutions or reorganisation of agencies, less bureaucracy, and so on.

It is worth noting that a single measure may exhibit more than one mode of action and therefore these categories are not mutually exclusive.

³ Cameron, H. *The European Trend Chart on Innovation, Thematic Report "Innovation and IPR"*, July 2000 and Pierrini, I. *The European Trend Chart on Innovation, Thematic Report "Innovation and IPR"*, May 2001.



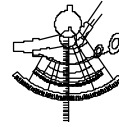
As can be seen, these categories lie along a spectrum of support measures from the indirect promotion of awareness of the importance of IPR, through the improvement of the regulatory framework for IPR, and the establishment of intermediaries and advisory services for IPR issues, to direct support for general or more specific assistance with the IP process.

2.2 Targets

The datasheets provide the following nine categories of targets towards which measures may be directed:

10. SMEs/industrial SMEs
11. Companies/industrial companies
12. Managers
13. Individuals
14. Research institutes and researchers
15. Students/graduates
16. Public authorities/organisations
17. Universities
18. Other.

It should be noted that, as in the case of modalities, these categories are not mutually exclusive, and a single measure may be directed at more than one target audience.



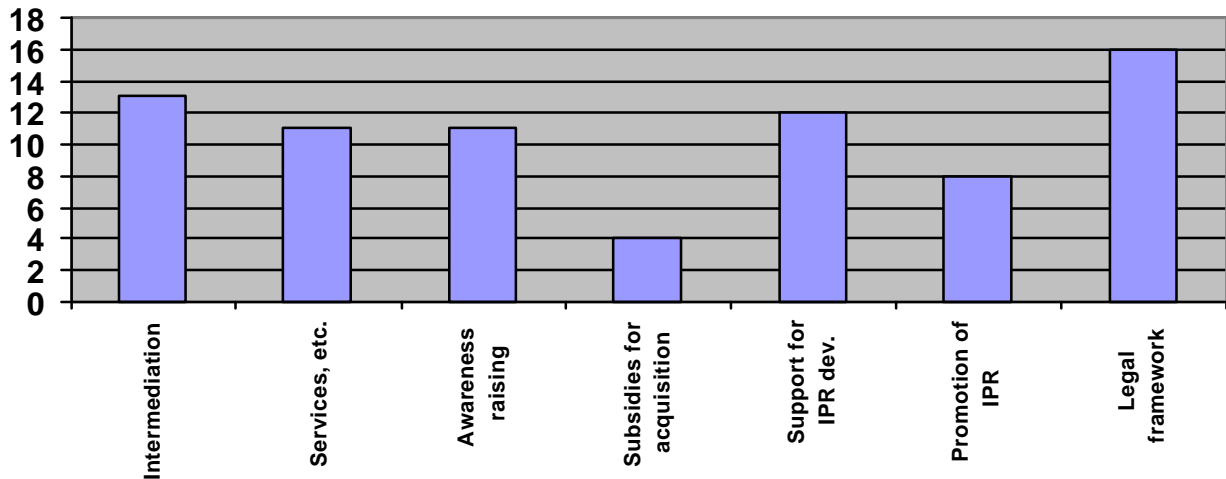
3. Analysis

Table 1 provides an overall categorisation of all extant Trend Chart measures relating to IPR policy by mode of action and by target. The names of the relevant measures are presented together with the year in which the measure came into effect.

3.1 Modalities: Overall distribution

From the following graph (Figure 1) it appears that in the countries covered by the Trend Chart governments have placed most effort in improving the legal framework for IPR, followed by the establishment of IP intermediaries. Support for IPR development, promotion of awareness of IPR at the general level and the provision of IPR advisory/consultancy services all follow. Not surprisingly, the most direct approach – that of subsidising the acquisition of IP – forms the least common modality.

Figure 1: Distribution of IP support ‘effort’ by mode of action.

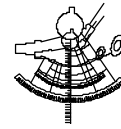


Because IP is such a significant issue in the process of innovation and the successful commercialisation of the outputs of research, it is not unsurprising that many measures have been introduced which aim to increase awareness of IPR at both the general and specific levels. The prevalence of measures addressing the legal framework for IPR is likewise easily explained by moves towards the adoption of the Community Patent. Therefore, it seems that a range of complementary measures have been and are being introduced to raise awareness of the significance of IPR and to facilitate the better-informed use of IPR through supporting services and advice provision.

It should be noted, however, that equating ‘effort’ with a simple count of relevant support measures does not necessarily provide a reliable indication of the true level of effort. Indeed, ‘effort’ in itself is a rather abstruse term which may encompass all or some of the following variables:

- relative policy priority of the sector,
- scope of measure,
- allocation of financial resources,
- allocation of other resources,
- desired impact.

In an effort to quantify the concept of effort, a simple scoring system for national policy priorities has been devised and has been applied in the various Country Reports produced under the Trend Chart. Under this system, each Action Line is allocated a number of points reflecting its relative importance in terms of national priority objectives. A full description of this system and its associated *caveats* may

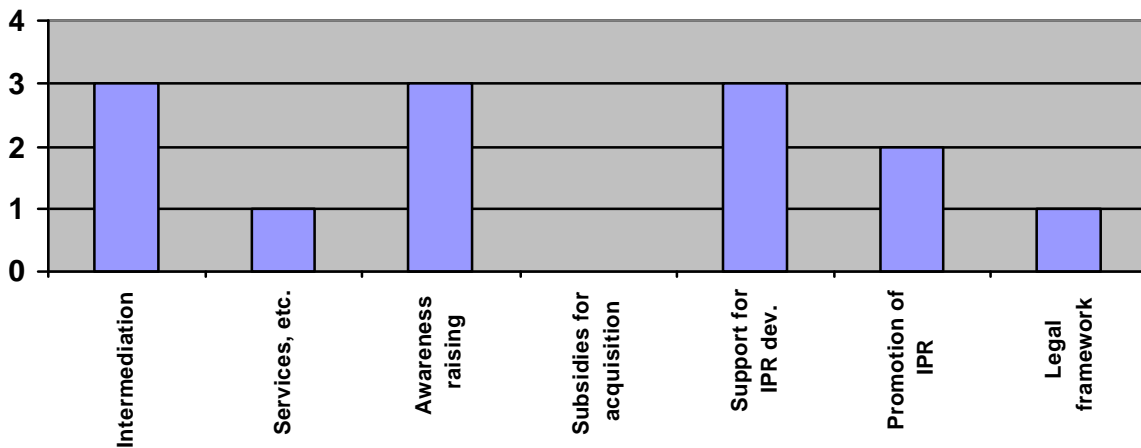


be found in any Country Report. In general terms, the scoring system used in the tables is probably best described as “a snap-shot of the relative importance of particular Action Lines as perceived by national policy-makers”. This issue is dealt with further in Section 3.5.

3.2 Modalities: Recent trends

The above analysis is based on all the current measures reported in the datasheets. In order to determine any recent trends in IP-related innovation policy support, the analysis was repeated for measures starting in 2001 and thereafter. The datasheets indicate that there are eight relevant measures in the EU and Associated States. It should be noted, however, that each country will vary in terms of the needs and priorities of its specific innovation system and that this level of variation coupled with the low number of measures could mask any emergent trend. Figure 2 presents the results of this analysis.

Figure 2: Distribution of modes of action for measures introduced in 2001 and 2002.



Again, the most frequent modalities are support for IPR development, awareness raising and the creation of intermediaries, whilst measures concerning the legal framework have become less frequent.

3.3 Targets: Overall distribution

Figure 2 illustrates the distribution of extant IPR measures according to target type. As may be seen, and as might be expected, ‘industrial companies’ forms the largest target category, with SMEs representing the second largest category. Ignoring the general category ‘other’, Research Institutes and researchers, and Universities are the third and fourth most frequently targeted categories. These results are not surprising, seeing that the issue of IPR is likely to be of greatest concern to the sources of IP (i.e. researchers in companies and in public research institutes, including higher education institutions). The protection of IP is also a particular concern in new technology-based companies, start-ups and also to entrepreneurs. This is particularly true where lack of awareness and information, together with the comparatively high costs of IP registration, are likely to raise barriers to commercialisation, which explains the targeting of companies and SMEs.

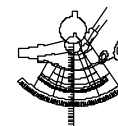
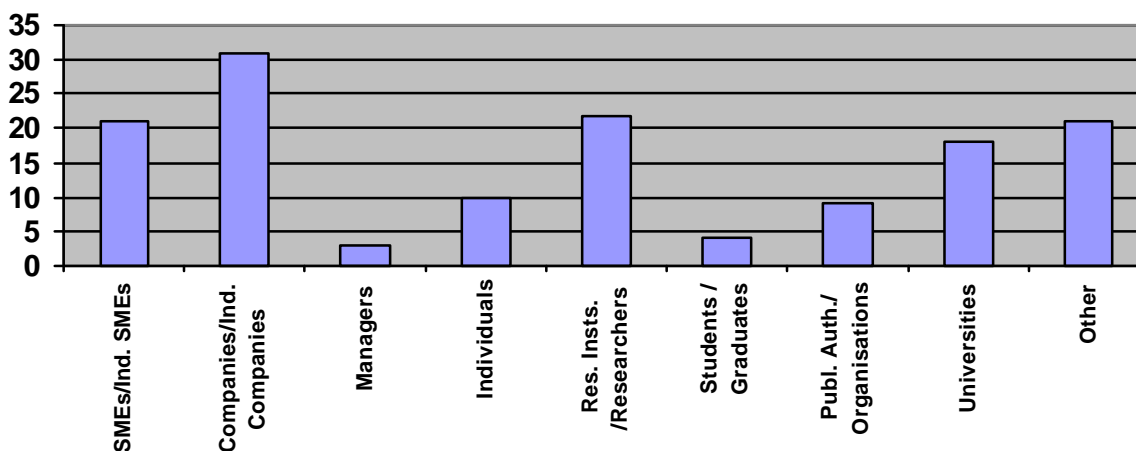


Figure 3: IPR measures and targets

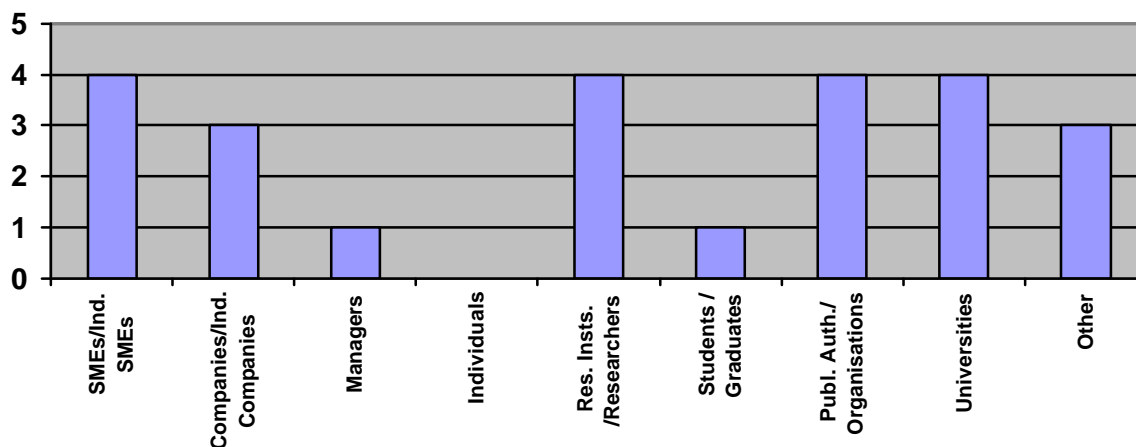


3.4 Targets: Recent trends

This section, in parallel to Section 3.2, examines the characteristics of IPR-related innovation support measures introduced since 2001. Figure 4 below presents the results of this analysis.

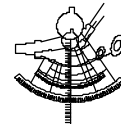
Once again, as in the previous Section, the producers of IP (companies, research institutes, public organisations and universities) form the major targets, with SMEs representing the largest target sector.

Figure 4: Targets of IPR measures introduced in 2001 and 2002.



3.5 Analysis of IPR policy priorities

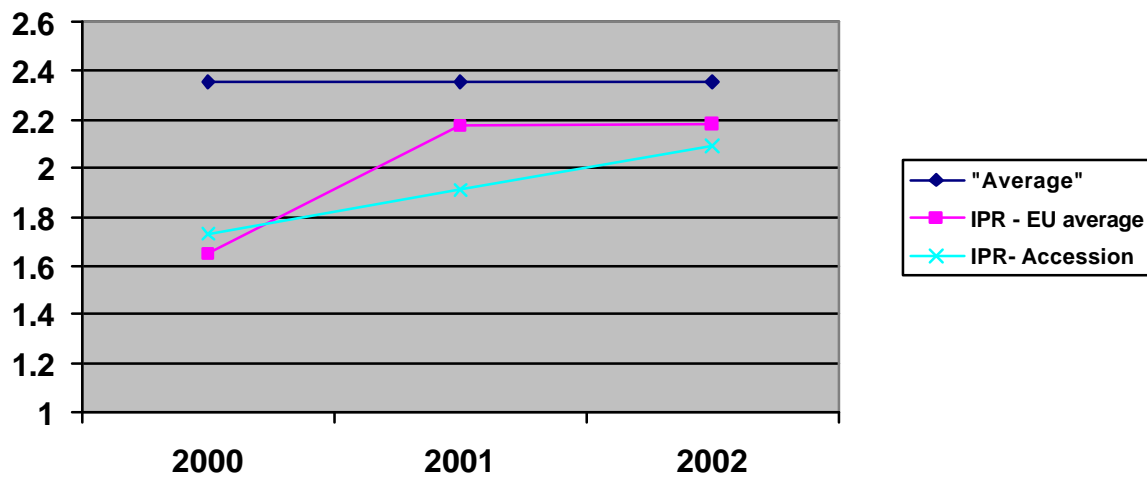
As noted in Section 3.1 above, the straightforward counting of policy-relevant measures provides only a partial indicator of innovation support activity and policy intent. The September 2002 series of Country Reports presents policy priorities tables for July 2000, September 2001 and September 2002. Based on these data, an analysis was made examining the average score for IPR-related policy priority (for both EU Member States and Associated Countries and for Accession Countries) in relation

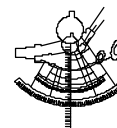


to the overall theoretical average priority score (that is, if all Action Lines were accorded equal relative priority).

The results, shown in Figure 5, clearly indicate that in all groups of countries the issue of IPR-related innovation policy has become much more important over the last three years. This underlines the general observation made above that IPR policy is becoming an integral part of the innovation policy portfolio. Whilst IPR policy is still not viewed as one of the major relative priorities in the EU Member States and Associated Countries, it is clear that its significance has been recognised. Similarly, IP-related innovation policy is increasing in importance, and is approaching the EU level in the Accession States.

Figure 5: Relative 'scores' of IPR-related innovation policies





4. General Trends

A review of the qualitative information provided in the Trend Chart Country Reports for September 2002 (the relevant excerpts from which are presented in Annex 1), indicates the following general trends. Overall, there has been little shift in these general trends from those identified in previous reports in this series.

The general trends may be described as follows:

- a recognition of the importance of IPR issues in the broader field of innovation, and its corollary;
- increasing the awareness (and use) of IPR in innovation concerns;
- development and strengthening of the IPR infrastructure;
- reform of legislation concerning IPR;
- introduction of specific public measures;
- promotion of collaboration between the public and private sectors.

4.1 Increasing role of IPR in the innovation process

The general shift towards the concept of the 'Knowledge-based Economy' has forced recognition of the use of knowledge as a commodity and also the pivotal need to secure and protect its ownership. As a result, many governments are focusing on the issue of IPR as an element of innovation policy. For example, the Austrian Government has recognised that the current situation concerning IPRs is unsatisfactory –since ownership of inventions rests with the Republic, and, due to inactivity on the part of the latter, ownership reverts to the researcher, little opportunity is open to universities to generate funds from their entrepreneurial activity. Likewise, the Dutch government has identified patenting as a major policy issue within recent policy statements (for example, the budget of the Ministry of Economic Affairs - EZ⁴). As in Austria, patenting and knowledge protection in universities has formed a specific focus of attention, although the impact of Government recommendations on the university system is considered to be limited.

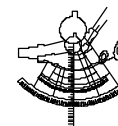
In Belgium, the Federal Minister for Economy has issued a note which reiterates the intention of the Government to improve the protection and exploitation of IPR in the country. A series of measures has been proposed, which include:

- 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 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.

In other countries too, recognition of the role of IPR in the innovation process has manifested itself in more tangible efforts (and the above list provides a fairly comprehensive sample of the possible measures) to improve the use of IP, either through direct support or indirectly through awareness raising and improvements to the framework conditions for IP. These efforts are detailed in the sections that follow.

Finally, in this section, the UK experience should also be noted. Stimulated by the challenges to IPR policy posed by scientific advances in fields such as genome research and by the increasing

⁴ See also: Ministry of Economic Affairs, *"Intellectual Property and Innovation: concerning the role of intellectual property in the Dutch knowledge-based economy"*, The Hague: March 2002



importance of information technology, in 2001 the Government established an Intellectual Property Advisory Committee. The remit of the Committee is to provide the Government with long-term strategic advice on the entire range of IP issues, including patents, copyright, trademarks and designs. It is also tasked with identifying and responding to emerging and strategic issues. Its specific areas of focus are:

- how IP can best contribute to Government objectives;
- risks and challenges to the working of the IP system;
- how to foster development of an international IP system in a way that encourages innovation and benefits consumers while balancing the needs of IP producers and consumers, and large and small business;
- wider effects of IP policy, including competition questions, and issues which cause public concern;
- the impact of new technology;
- where consultation and/or research is needed;
- the recommendations of other Government advisory IP bodies, such as the Human Genetics Commission and the International Commission on Intellectual Property Rules.

In addition, the UK Patent Office is undertaking a range of activities within the framework of the DTI's Science and Innovation Strategy, including examination of operating procedures, the Community Patent, and international patent rights harmonisation.

Amongst the Accession Countries, many have noted the benefits of membership of international bodies and agreements such as the World Intellectual Property Office and the European Patent Convention, or of collaboration with the programmes of the European Patent Office. These activities are also noted as having fostered a general greater awareness of the significance of IPR in innovation in the country. Whilst in some cases the establishment of a national Patent Office has been a comparatively recent event (for example, in Romania), most of these countries are placing strong emphasis on the role of IPR in their innovation policies, as is evidenced by its comparative increase in Figure 5 above. A clear example of this greater significance is provided by the National Concept on Innovation (LV 20) adopted by the Latvian Council of Ministers in 2001. This outlines entrepreneurship as one of the four basic components of the national innovation system and highlights the need to strengthen legislation in the field of IP.

4.2 Increasing the awareness of IPR in innovation

A direct consequence of the high-level recognition of the importance of IPR for the efficient functioning of systems of innovation is the various efforts made by governments to increase the level of awareness of IPR issues amongst the actors in the system. As noted in the above analyses, the primary targets for many measures, including those aimed at awareness-raising, are the producers of knowledge, namely companies, research institutes, public research organisations and universities.

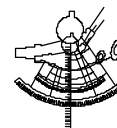
In general, such awareness programmes have two main objectives:

- to promote IPR as an essential tool in the management of innovation;
- to provide training on how to use IPR most effectively to protect IP.

A review of the Country Reports indicates that the methods used to promote awareness fall into the following sub-categories

4.2.1 Pro-active awareness programmes

There is a perceived need to make industry, and particularly SMEs, more aware of the importance of IPR. These campaigns frequently involve a more proactive stance on the part of national patent offices. Examples of such campaigns may be found in the Belgian Federal Government's proposed efforts, described above. Patent offices (or their equivalents) also offer awards in order to promote awareness and to enhance the public images of IP; examples include the Greek Industrial Patent Organisation (GR 42) and the French National Institute for Intellectual Property – INSTI. The French



patent office has also launched an Internet-based portal – ‘Plutarque’ – which is intended to facilitate general public access to IP-related information. Similar Internet-based services have already been reported in a number of other countries.

4.2.2 Deployment of Promotional programmes

Several countries have instigated specific promotional campaigns intended to heighten the use of IP by researchers and also to educate and train them in the better informed use of IP. Many of these measures actually form part of the operational practices of measures that have been categorised under other headings, such as development of the IPR infrastructure (Section 4.3) and specific public measures (Section 4.5). Good examples include the German patent information centres (DE 07) and elements of the INSTI-network (DE 24). In the latter case, the sub-programme ‘InWert’, a new measure, offers financial support to higher education institutions for the introduction of new courses on the commercialisation of inventions (including IP issues). Similarly, the INSTI Innovation Action provides support to innovative enterprises and start-ups in order to optimise their innovation activities and to establish a permanent culture of innovation. Several individual measures are on offer, including innovation workshops, innovation checks, technology evaluations, innovation coaching, patent searches, and consulting services in the fields of IP, exploitation of new business fields, commercialisation strategies, and market monitoring.

4.3 Developing/strengthening IPR infrastructure

The development and reinforcement of existing infrastructure for IPR forms a logical complementary area of innovation support policy, and follows up campaigns to heighten awareness. There is a clear trend in these types of measure apparent in the Country Reports. However, whilst the promulgation of general statements on the importance of IPR and information dissemination campaigns offers a comparatively low-cost option for innovation support, making changes to the IPR infrastructure will entail greater levels of resource investment.

Three broad categories of initiative may be discerned under this heading: the activities of Patent Authorities, interface structures and IT services/databases.

4.3.1 Patent authorities’ activities

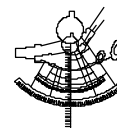
A number of countries have instigated reforms to the ways in which their national patent offices are structured or operate. For example, Portugal has restructured its National Institute for Intellectual Property – INPI (PT 14) with a view to encouraging it to take a more proactive stance. Other Portuguese measures are detailed below. In Norway steps have been taken towards reducing the amount of time required for the processing of patent applications in order to increase the number of patents being filed. Some changes in legislation (detailed below) will also affect the ways in which patent authorities operate.

4.3.2 Interface structures

Under the level of the national patent authority (Patent Office, National Institute, etc.) a number of countries have put in place structures that act as intermediaries for the provision of a range of patenting services. Some examples are given below.

In Flanders, the regional government funds interface structures (BE 18) at the universities. These are intended to promote the commercialisation of research results and IPR protection at universities. The funding framework of these structures has been the subject of a recent review and they are now provided with a five-year funding budget. Also in Belgium, this time in Wallonia, similar university/industry interfaces exist (BE 47). These have recently been reinforced with the provision of specialists who are able to offer advice on IPRs and patents.

A vast network of Patent Information Centres has been established in Germany (DE 07), offering SMEs access to scientific and technological information. A whole range of support is on offer, including access to original patent documents, support for information searches, free consultations with patent agents, etc.



Similarly, Portugal has established an Industrial Property Support Offices (GAPI) Network (PT 26) connected with the national patent institute (INPI). The offices provide professional support on the use of IPR, whilst promoting awareness of the benefits of patenting activity. The move forms part of a wider initiative on the “Valorisation and Promotion of the Industrial Property System”.

Germany is particularly well advanced in this area. The new ‘Commercialisation Initiative’ (DE 72) is designed to assist Higher Education Institutions and other public research organisations with improving the commercialisation of IP. Specifically, the Initiative aims at:

- creating professional patenting and commercialisation infrastructures within the public research sector;
- promoting the use of patents for protecting the research results of public science institutions;
- increasing further education in the field of IPRs; and
- developing a network of commercialisation units in the public science sector.

It provides financial support for building up an effective patent commercialisation infrastructure by making use of existing patent offices and service providers, including financial sources for defending IPRs. Furthermore, information events that aim to disseminate patent relevant knowledge receive funding.

4.3.2 IT services/databases

The introduction of so-called IP portals, such as the French ‘Plutarque’, has already been mentioned. However, the use of online information services, including searchable databases which offer prospective inventors the chance to undertake their own patent searches, or to increase their knowledge on state-of-the-art technologies, is also increasing. For instance, several of the Belgian regions offer database access (BE58, BE 40, BE 48), while so-called ‘technology watch’ and patent search services are provided by a number of organisations and the technological attachés of the Belgian collective research centres.

Under the German INSTI-Network (DE 24), a sub-programme called AKPat offers an Internet-based platform to researchers at higher education institutions and other bodies. This provides an overview on patenting-related competence at higher education institutions, and is intended to draw together the various commercialisation promotion activities at universities, etc.

In Denmark, a project has been launched with the aim of improving electronic access to patents databases for companies and researchers. The project, due to be completed in late 2003, comprises the establishment of: a common entrance to Danish patents and utility models; electronic access via CD-ROM/DVD to the complete collection of patent information of the Danish Patent and Trademark Office; and an Internet-based database comprising all public available information from the Danish patent database.

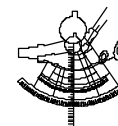
Also relevant is the ongoing introduction of on-line patent and copyright registration procedures announced in Luxembourg (see Section 4.5).

4.4 Reform of legislation concerning IPR

A number of governments have recently amended or introduced legislation dealing with intellectual property issues. Partly, these changes have come about through the new demands imposed by the knowledge economy (as discussed above) and partly through a need to harmonise legislative frameworks. There are three major drivers for the harmonisation of IPR legislation:

- increasing globalisation of national economies (and particularly trade);
- formalisation of rules within the World Trade Organisation;
- the current EU enlargement programme and the advent of the Community Patent.

Thus, in Greece, a new article (Law 2919/01 article 11) recognises the role of IPRs in contributing to the creation of new companies, and encourages new companies to improve their utilisation of



research results. In Ireland, the Government has brought into force a number of important Acts to underpin the development of the knowledge-based economy. These include the Electronic Commerce Act 2000, the Copyright and Related Rights Act 2000 and the Communications Regulation Act 2002. Similarly, the 'One Hundred Days Programme' of the new Italian Government foresees a number of important changes in the general framework concerning patents for commercial inventions. By providing inventors with the rights of ownership and a quota of any proceeds, the changes seek to stimulate research activities in universities and public institutions. A similar modification in Spanish law now allows researchers from public research organisations to obtain profits from the commercial exploitation of, or cession of IPR from, their inventions.

The issue of IP ownership is also under debate in Sweden. In this case, a Government Research Bill of 2000 raised the issue of patent ownership in higher education institutions and the situation is now awaiting evaluation of the Danish experience (see Section 4.6). Changes to the Portuguese Industrial Property Code are also foreseen, whilst at the operational level new legislation has been approved which regulates the activity of industrial property agents – new appointees are now required to hold a diploma in engineering, law or economics. Similar investigations are under way in Finland (see Section 4.6). The currently proposed amendment to the patent law would bring IPR practice in Finland closer to that prevailing in other Member States of the European Union, the US and Japan.

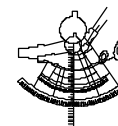
With regard to EU enlargement, it can be noted that the Cypriot patent law (CY 04, adopted in 1998) has been amended in order to be in line with the *acquis communautaire*. The Trademarks Law has been amended for similar reasons. At a general level, a number of countries have expressed unilateral or multilateral support for the need for a Community Patent and have started procedures for dealing with its prospective introduction.

As has already been noted, many of the Accession Countries have become members of international bodies which have remits dealing specifically or in part with IP issues. Some of these bodies, such as the World Trade Organisation, have requested members to put into place more effective IP protection frameworks (for example, Bulgaria, Latvia, Poland, Romania). Likewise, the understanding that valuable revenue and resources are being lost through poor IP frameworks has led several countries to tighten their copyright legislation and to introduce measures aimed at the reduction of counterfeiting.

4.5 Introduction of specific public measures

As mentioned earlier, there is a clear and strong trend in recognition that a successful and competitive economy needs a good IPR system. It is understood that the main drivers to a successful economy such as innovation, inventiveness, creation of SMEs and creation of a knowledge-based economy, depend on an effective, efficient and user-friendly IPR system. Knowledge creation places greater emphasis on the concept of 'national system of innovation'. This covers many different but well integrated instruments such as: the infrastructure for efficient technology transfer between academia and industry, instruments to finance innovation, technology forecast tools to guide R&D, etc. A common requirement for the successful and efficient operation of all the above measures is a good IPR system which will provide a reasonably predictable and stable background giving incentives to creativity. However, once such prerequisites are in place, the mere cost of patenting activity may act as a barrier; hence, in some cases, further incentives may be offered to induce patenting. Such measures may include tax incentives, the provision of free advisory and patent search services, or even direct funding or reimbursement of the incurred costs. Many of these measures are aimed at SMEs.

Thus, the SME patent initiative, a subprogramme of Germany's INSTI-Network (DE 24), aims to stimulate SMEs which so far have not submitted any patent applications, but for which the patent system is of value. The initiative offers funding to improve understanding of the patent system and to assist with searches and information to demonstrate to SMEs the operational value of patent applications and the patent system as a whole. Additionally in Germany, individual inventors, small enterprises, and researchers from public science and research may apply for financial aid for patenting activities (DE 06), under a programme administered by the Fraunhofer Patent Bureau of



German Research. It offers state loans for innovative inventors in order to support their receiving a patent for an innovation. The Patent Office also helps to market and sell the new product. Support is presented as a state loan free of interest payments and which has to be repaid only in the event of generation of revenue from the product. The office is entitled to receive a quarter of such revenue.

In Portugal, the Industrial Property Use Incentive system – SIUPI (PT 18) encourages companies to make increased use of patents in their commercialisation activities.

The Belgian measure (BE 45), operated by the Walloon Government, also falls under this category of support. It offers the reimbursement of patent application costs to universities seeking to commercialise the results of government funded research projects,.

In Israel, the TNUFA – Start-up Promotion Programme 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. Likewise, R&D projects supported by OCS through the Law for encouragement of R&D are entitled to receive funding for their patenting expenses.

Direct financial reimbursement is not always necessary – for example, easing administrative restrictions and burdens on the patent application process may also stimulate greater use of the patent system by companies and others. One example is provided by Luxembourg where, in an effort to encourage companies (especially SMEs) to register patents, the Intellectual Property Rights section of the Ministry of Economy has established two new measures:

- *The 'short-term patent'*: which differs from the classic patent in the duration of the protection and its cost. The depositor has the choice between a six-year patent, which does not require a research report, and the 20-year 'classic' patent which does require it. The difference in term of duration is justified by the broader legal safety supplied through the research report. Any depositor who not wanting to spend money on the research report will be allowed a six-year protection patent, whereas under the current regulation, no patent at all could be delivered.
- *Online registration of patents and copyrights*: To facilitate and speed-up the patent and copyrights registration process, a project is being developed to allow the on-line registration and consultation of the patents and copyrights.

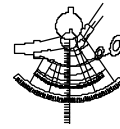
4.6 Promotion of collaboration between public and private sectors

Improving the interaction and level of collaboration between the public and private sectors forms a major arm of innovation support policy in its own right. However, the issue of IPR is critical to this area. A clear and accessible IPR framework is necessary to ensure that the rights of researchers and institutions are protected and that they all benefit from the revenues generated. It is also needed to build confidence amongst those involved in research collaboration involving the public and private sectors.

Several of the measures mentioned above are applicable to this category, for example the granting of IPR rights to Walloon universities, together with the reimbursement of patent application costs offered under BE 45. Likewise, the provision of interface structures at Flemish universities (BE 18) and the reinforcement of the Wallonian university-industry interfaces with patent specialists (BE 47).

While primarily aimed at fostering entrepreneurship, the reinforcement of the Greek HEI Liaison Offices (GR 53) may also be viewed as an IPR support measure as it includes the signposting of information on patenting activities.

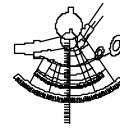
The issue of ownership of IP in universities and public research organisations also impinges upon the willingness of researchers to engage with or collaborate on research activities that can be commercialised. A recent development in this area concerns the exclusive right of German HEI



research personnel (professors) to own the intellectual property of inventions arising from their research activities at the HEI, which was abolished in February 2002. This was instigated by a change in the relevant law ('*Arbeitnehmererfindungsgesetz*', § 42 (DE 59). Previously, the so-called '*Hochschullehrerprivileg*' was perceived as a barrier to commercialisation because of the lack of information, experience and money necessary to commercialise patents successfully. Despite a significant increase in the number of patents applied for by university professors, the overall commercialisation results were assumed to be minor. Now, however, IPRs on inventions belong to the university whilst inventors receive a share of the royalties arising from the commercialisation.

A similar measure has been noted in Denmark. In January 2000 a new law on patents came into force, making it possible for universities, research institutions and public hospitals to take over the rights to inventions of their employees and negotiate terms of rights with companies. At the same time the institutions are obliged to further the commercial use of inventions. An appropriation of DKK 58 million (approximately €7.8 million) covering the period 2000 - 2003 has been granted to support implementation of the Act. The establishment of new infrastructures at universities in support of the Act is believed to have considerable strategic significance.

In Finland it has been recognised that the institutional and regulative frameworks on intellectual property rights in universities are forming barriers to the effective utilisation of research. A committee set up by the Ministry of Trade and Industry together with the Ministry of Education has examined this question regarding IPR and the new emerging mission of universities. In 2002, the committee proposed the reversal of the Act of Employees Rights and a reform of the University Act (Ministry of Trade and Industry 2002). According to the new proposal, university researchers would be in the same position as any employee; thus universities could take over the rights for inventions in joint projects carried out in collaboration between themselves and a third party. The new act would not cover the IPR in free academic research, where the inventor retains the right to decide the primacy of publishing and utilisation of his/her invention. However, the act would be contractual: the regulations would be applied if not contracted otherwise by the parties involved. The proposal for the new act regarding the protection of IPR in universities would change the current incoherence within universities and other public research organisations. In promoting the commercialisation of academic research, increased coherence and networking between the relevant organisations (Tekes, Sitra and the Academy of Finland) has been identified as an area for further development. In parallel with the reform of IPR legislation, competencies about IPR issues should also be strengthened among university administrations and staff.



5. Policy Issues

It is clear that policy-makers are increasingly recognising the role that IPR has to play across a range of areas and its emergence as an essential feature of a successful, innovative economy. Many of these issues are tackled by the national IPR-related measures and initiatives identified in this report. From these, a number of general trends have been identified. Nevertheless, there are several parallel emerging issues in the field of IPR which should also form the focus of attention for policy makers.

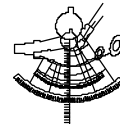
For example, at the EU level the following issues have been identified as significant in the sphere of public debate and policy-making:

- The changing role of IPR in the new knowledge-based economy and the effectiveness of current systems of IP protection, particularly concerning the development of new technologies.
- The need to achieve an optimum level of IP protection in order to strike a balance between
 - the incentives offered to innovators, and
 - the adverse effects on consumers caused by temporary monopoly power.
- The development of methods for companies to identify and evaluate their IP assets: In the global economy firms face more intense competition. To be able to sustain their competitive advantage firms must develop new competencies and new strategies. Evidence suggests that the most effective strategies are asset-based, placing reliance on firms taking advantage of their physical and intellectual assets. While there are some well-developed accountancy methods and procedures for the identification and valuation of companies' physical assets, there are no widely accepted methods of identifying and evaluating intellectual assets.
- Identification of best practice in the intellectual property management.

At the global level, one IPR issue that currently dominates discussions, particularly between the developed and developing countries, is that of patents and access to medicines. Facing difficult social and economic circumstances, developing countries hold the view that current IPR frameworks give unfair advantage to the developed countries. They argue that it is difficult to establish a level playing field when the current IPR system helps large multinationals retain competitive advantage by creating barriers to entry. Developing countries are therefore demanding exemptions from international IP requirements, especially in the case of patent protection for certain drugs. On the other hand, the view of developed countries is that patents, and IPR in general, do play an essential role in stimulating the development of essential drugs by offering incentives for investing in expensive and long-term research.

Developed countries also believe that the current facility for imitating and copying designs, software and other IP implies the need for stronger IP protection. They also believe that lack of enforcement of IPR laws in some developing countries has become a disincentive or even a barrier for investment.

It is essential, therefore, that the use of IPR in policies for innovation support should remain fully aware of these broader issues.



Annex 1: Extracts from Country Reports concerning IPR policy developments

AUSTRIA

In the past, Austria's policy-makers paid scant attention to the protection of intellectual property rights which, as a general rule, belong to the employer (i.e. the Republic of Austria). However, universities generally showed only little interest in exploiting their research results, except perhaps for institutes with joint research activities. The only measure touching 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.

The present situation concerning IPRs is seen as being unsatisfactory, as it does not create funds for financing universities. IPRs of university research belong to the Republic of Austria, which is usually not interested in exploiting them. As a result, the right to exploit IPRs comes back to the researcher and does not contribute to university finances.

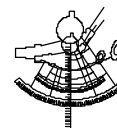
BELGIUM

The **Federal** Government is responsible for the management of the Belgian patent system. An effort is being made by the Federal Office for intellectual property rights (BE 05) to go beyond its traditional role of administering patent applications, towards the development of a pro-active awareness-raising campaign about the importance of patents. A recent policy note by the Federal Minister for Economy (see section 6) reiterates the government's intention to improve the protection and exploitation of IPR in Belgium. Several proposals have been identified, including: reducing 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 to allow 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.); online filing of patents; provision of additional personnel for Federally funded research centres and university interfaces to carry out prospective analysis in high-tech 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 is funding interface structures at the universities (BE 18) with the aim of ensuring, amongst other activities, the commercialisation of research results and protection of IPR in universities. The funding framework for these interfaces was reviewed recently to provide them with a five-year funding envelope linked to a programme of action. Additionally, one of the objectives of the Flemish research centres VIB and IMEC is to create a structured valorisation (technology transfer) policy for research results with industrial potential in their domains.

The **Walloon** government has also taken a series of steps to increase awareness of and encourage the protection of IPR, notably by patents. The measures taken in order to stimulate the exploitation of research results by universities include the granting to Walloon Universities and institutes of higher education of IPR rights to the results of R&D programmes financed by the Walloon government (see BE 45); the reimbursement of patent application costs to universities resulting from research projects financed by the region (BE 45); and the reinforcement of university-industry interfaces with specialised personnel able to advise in matter of IPR and patents (BE 47).

In all regions, financial schemes are also available to companies wishing to explore patenting possibilities or develop their knowledge of state-of-the-art technologies, either using patent databases (see BE 58, BE 40, BE 48) or to acquire IP rights (see BE 03, BE 10, BE 22, BE 50). 'Soft' support in terms of advice or specific research is also delivered by the technological attachés linked to the research centres in the regions (see BE 43). In addition, the acquisition of patents or technology licences by firms is supported by several tax or grants/loan schemes as part of an R&D project (see section 2.6, 3.2 and 3.5 below). Technology watch and patent search services are provided by a number of organisations and also by the technological attachés of the collective research centres.



CYPRUS

The Cypriot patent law was adopted in April 1998 (Law Nr. 16 (I) 98) (CY 4) and subsequently amended to come into line with the *acquis*. In addition, an amendment to the Trademarks Law entered into force in December 2000, thus bringing the definitions of a trademark and the exclusive rights of the proprietor of the trademark into line with the *acquis*.

Again, according to the 2001 Regular report on Cyprus' progress towards accession: *"In the field of industrial and intellectual property rights (IPR), Cyprus' trademark and patent law is now far advanced. Only the implementation of the Directive on legal protection of biotechnological inventions and the Designs Directive is outstanding. Some additional adjustments of trademark legislation will be necessary upon accession. It is imperative not to postpone the implementation of the copyright acquis any longer. Substantial legislative changes are necessary to align it with the Directives on legal protection of design and databases as well as on certain aspects of Copyright and Neighbouring Rights in the Information Society and the Resale Directive."*

DENMARK

No new specific measures were introduced under this heading within the period under review. However, in January 2000 a new law on patents came into force, making it possible for universities, research institutions and public hospitals to take over the rights to inventions of their employees and negotiate terms of rights with companies. At the same time, these institutions are obliged to further the commercial use of inventions. An appropriation of DKK 58 million (about €7.8 million) covering the period 2000 - 2003 has been given to support implementation of the Act. The establishment of new infrastructures at universities in support of the Act is believed to have considerable strategic significance.

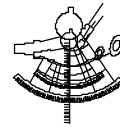
A project has been launched with the aim of improving electronic access to patents databases for companies and researchers. Due for completion in late 2003, the project comprises the setting up of:

- a common entrance to Danish patents and utility models,
- electronic access via CD-ROM/DVD to the complete collection of patent information of the Danish Patent and Trademark Office, and
- an Internet-based database containing all publicly available information from the Danish patents database.

FINLAND

Universities are increasingly taking part in the commercial utilisation of research results. The salient role of universities as a source of economic growth and innovation sets new demands on the protection of intellectual property rights. These changes pose new challenges for academic research and university education. However, the institutional and regulative frameworks for intellectual property rights in universities are recognised as barriers for the effective utilisation of research. A committee set up by the Ministry of Trade and Industry together with the Ministry of Education has examined this question regarding IPR and the newly emerging mission of universities.

In May 2002, the committee proposed the reversal of the Act of Employees Rights and a reform of the University Act (Ministry of Trade and Industry 2002). Under the existing act, the inventor owns the rights to his/her invention but this right is transferred to the employer. However, researchers and teachers in universities or similar scientific institutions are not covered by the act. Hence the basic rule is that the researcher owns the invention. According to the new proposal, the researcher and teacher exception rule should be reversed — i.e. university researchers would be in the same position as any employees. If this rule comes into operation, universities could take over the rights for inventions in joint projects carried out in collaboration between themselves and a third party. The new act would not cover the intellectual property rights in free academic research, where the inventor has the right to



decide the primacy of publishing and utilisation of his/her invention. However, the act would be contractual: the regulations would be applied if not contracted otherwise by the parties involved.

The committee proposal also includes the clarification of the legal issues that would enhance the overall framework for innovative activities and their establishment as a third basic mission of the universities along with education and basic research. Under the proposal, the utilisation of research results is included in the functions of the universities.

The proposal for the new act regarding the protection of intellectual property rights in universities would change the current incoherence within universities and other public research organisations. The amendment would also bring the IPR practice in Finland closer to the prevailing practice in other Member States of the European Union, the US and Japan.

To promote the commercialisation of academic research, one area for further development is working towards increased coherence and networking between the relevant organisations Tekes, Sitra and the Academy of Finland. The planning and costs of commercialisation should be integrated with research projects. In parallel with the reform of IPR legislation, the competencies of university staff and administrations on IPR issues should also be strengthened.

FRANCE

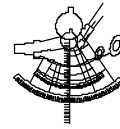
The national operator is the National Institute for Intellectual Property (INPI) (see website: www.inpi.fr). This institute, under the supervision of the MINEFI is in charge of:

- elaborating texts, laws and regulations for intellectual property,
- granting patents,
- providing public information in the field of intellectual property,
- maintaining the national trade and firms register.

Among others, every two years the institute organises the INPI's innovation awards ('INPI Trophies'), intended to promote SMEs which have successfully used patents for business development. The Trophies are given out at two different stages: first in the regions and later at the national level. The regional Trophies are intended to reward enterprises and research organisations that have carried out a good intellectual property policy. The winning parties from the region then compete for the national Trophies. This year the national Trophies will be awarded at the end of 2002.

Although the budget of the Institute decreased by 2% in 2001 (€124M), the INPI continues to be active in the area of intellectual protection and industrial property in the country, as follows:

- Launch of Plutarque: an Internet portal aiming to facilitate access of the large public to information related to intellectual property. The new tool was presented in the online showroom during December 2001.
- Finding a new concessionaire for the diffusion of information on industrial property: starting in March 2002, a new concession will open up the way to a new service in professional information
- Presentation of the book called: "Patents and Trade Marks: a history of intellectual property", in the framework of the celebration of IP's fiftieth anniversary. The book studies the fundamentals of the industrial property and the origin of current legislations



GERMANY

Fostering the use of intellectual property rights (IPRs) is addressed in German innovation policy both in the field of legislation (IP regulation) and via promotion programmes. Two main **new developments** have taken place in 2002.

1. The exclusive right of Higher Education Institution research personnel (professors) to own the intellectual property of inventions stemming from HEI research activities was abolished in February 2002 by a change in the respective law ("*Arbeitnehmererfindungsgesetz*", § 42; see DE 59). This so-called "*Hochschullehrerprivileg*" was viewed as a hindrance to commercialisation because of the prevailing lack of information, experience and money necessary for successful commercialisation of patents. Therefore, despite a significant increase in the number of patents applied by university professors, commercialisation results are assumed to be minor. From now on, IPRs on inventions belong to the university while the inventors will receive a share of the royalties out of the commercialisation.
2. As an accompanying measure, a new programme was introduced to help HEIs and other public research organisations to improve the commercialisation of IP at their institutions. Called the 'commercialisation initiative' (DE 72) it aims to:
 - a. create a professional patenting and commercialisation infrastructure in public research,
 - b. promote the use of patents for protecting research results in public scientific institutions,
 - c. increase further education in the field of IPRs, and
 - d. build up a network of commercialisation units in public science.

It provides financial support for building up an effective patent commercialisation infrastructure by making use of existing patent offices and service providers, including financial sources for defending IPRs. Furthermore, information events that aim to disseminate patent relevant knowledge are receiving funding.

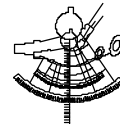
A number of other, often well established, promotion programmes also aim to strengthen the use of IPRs by enterprises, HEIs and PSREs, as described below.

Individual inventors, small enterprises, and researchers from public science and research may apply for financial aid for patenting activities (DE 06). This programme is administered by the Fraunhofer Patent Bureau of German Research. It offers state loans for innovative inventors in order to support their 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 free of interest payments. The loan has to be repaid only if revenue is generated. The office is entitled to receive a quarter of such revenue.

There is a huge network of Patent Information Centres (DE 07) in Germany. They give SMEs access to scientific and technological information essential for innovation management in companies. Therefore a nationwide network of patent information centres has been set up. These centres offer various types of support such as 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.

Within the INSTI-Network (DE 24), several subprogrammes are working to increase the use of IPRs:

- InWert - a **new measure** - provides financial support to higher education institutions for introducing new courses on the commercialisation of inventions (including IPRs). It aims to strengthen the integration of know-how related to commercialisation in the curricula of science, engineering and business administration studies. Both lectures on commercialising invention and practical studies (either at HEIs or in firms) may receive support.
- The INSTI SME patent initiative aims to activate SMEs which have not so far submitted any patent applications, but for which the patent system is of value. It offers funding to facilitate



an understanding of the patent system. It also facilitates searches for information to demonstrate to SMEs the operational value of patent applications and the patent system.

- AKPat provides an Internet-based platform for higher education institutions and researchers which gives an overview on patenting-related competence at higher education institutions, including supportive infrastructure. AKPat attempts to bring together especially the divergent intermediary commercialisation infrastructure at higher education institutions.
- The INSTI Innovation Action gives support to innovative enterprises and start-ups in order to optimise their innovation activities and to establish a permanent culture of innovation. Several individual measures are offered, including innovation workshops, innovation checks, technology evaluations, innovation coaching, patent searches, and consulting services in the fields of IP, exploiting new business fields, commercialisation strategies, and market monitoring.

Other INSTI measures are Tour d'Innovation (see 1.3), Innovation Market (see 2.1), INSTI Inventors Clubs (see 1.1) and INTRA (innovation training, see 3.5).

GREECE

IPR regimes remain a low priority in terms of implementation. A slight reinforcement of the HEI Liaison Offices (GR 53) may be considered as an indirect strengthening of IPR commercialisation, though its primary target is entrepreneurship. The measure was launched in the framework of the second Operational Programme for Education and Initial Vocational Training (EPEAEK) of the Ministry of Education and Religious Affairs (Action 3.1.2.c). It is addressed to the existing liaison offices of tertiary education institutes and aims to reinforce their efforts to support students and graduates of universities or institutes for vocational training (IEK) in the development and implementation of their entrepreneurial ideas. In this framework the liaison offices appoint new executive staff responsible for giving information on the existing opportunities and promoting collaboration with the most important external organisations (e.g. centres for technological research, EOMMEX, Federation of Greek Industries, etc). The total budget of this call is €3,600,000. The call for proposals was launched in March 2002 and for submission until 5 June 2002. In the end, 29 proposals were submitted, and they are still being evaluated.

The Industrial Property Organisation continues to offer awards to inventors as a policy stimulating creativity and enhancing the public image of IPRs (GR 42).

Indirectly the new scheme PRAXE (GR 39) supports IPR because it subsidises researchers working with new companies that are exploiting their research results.

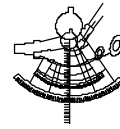
Recently, two directives were ratified, one for biotechnological inventions and one for micro-electronic designs.

Law 2919/01 article 11 also foresees an improved treatment of IPRs, which are recognised as contributing to the creation of new companies. The law encourages all organisations to improve the use of research results.

IRELAND

The Government has enacted a number of critical Acts to underpin the development of a knowledge-based economy, including the Electronic Commerce Act 2000, the Copyright and Related Rights Act 2000 and the Communications Regulation Act 2002.

It has been recommended in a major report on e-Business (see Section 6 below) published by Forfás that Ireland should now provide an overarching legislative and regulatory framework for e-Business and, in the context of the development of the knowledge economy, ensure appropriate protection for online intellectual property.



The Forfás e-Business report also recommended that consideration should be given to the creation of a special court to deal with intellectual property law and technology law issues similar to the Patents Court in the UK.

The Irish and Swedish prime ministers, in a letter to the Spanish Presidency in advance of the Barcelona Summit, highlighted the need for a Community Patent: "We believe that a cost-efficient and competitive **community patent** is an essential component of European competitiveness, not the least for Small and Medium Enterprises."

ISRAEL

According to the revised Law for the Encouragement of Industrial R&D (IL 04, now awaiting approval by the parliament), companies will be allowed – subject to certain conditions – to transfer abroad any know-how acquired through government funding, once they have reimbursed the government on the basis of the know how value at time of sale, or on its contribution to the company price in case of company sell-out.

The US-Israel Science and Technology Commission has authorised a programme in harmonization in the field of intellectual property, to include – but not be limited to – seminars and training. The goal is to obtain equal and mutual treatment and recognition of patent and other intellectual property rights in both countries.

The TNUFA-Start-up Promotion Programme is designed to give momentum to promising entrepreneurs wanting to develop start-up companies. The assistance portfolio provided by TNUFA includes Patent Search and funding for patent filing. In addition, R&D projects supported by OCS through the Law for encouragement of R&D are entitled to refunds of their patenting expenses.

Recently, the Government has been making a strong effort to enforce intellectual property rules, especially those pertaining to software and to music.

ITALY

New rules on intellectual property have been announced by the new Government in its "One Hundred Days Programme": the Programme foresees some important changes in the general discipline concerning patents for industrial inventions. These changes are designed to stimulate research activities by providing the authors of such inventions, who have the status of employee at the Universities or Public administrations, with all the rights coming from their inventions, including a quota of the proceeds coming from industrial exploitation.

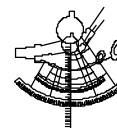
LIECHTENSTEIN

No new developments were reported.

LUXEMBOURG

If it is essential to help companies develop and better manage innovation, it is just as important to help them to protect this investment. To make companies (especially SMEs) more aware and to encourage them to register patents, the Ministry of Economy (Intellectual Property Rights section) has created two new measures as follows.

The 'short term patent': The difference between this patent and a classic one lies in the duration and cost of the protection. The depositor may choose between a six-year patent which does not necessitate a research report and a 20-year 'classic' patent which does need one. The difference in term of duration is justified by the broader legal safety supplied by the research report. The depositor



not wishing to spend money on a research report will be allowed a six-year protection patent, whereas under the current regulations it would not be possible to deliver any.

The online registration of patents and copyrights: To facilitate and speed up the patent and copyrights registration process, a project is being developed to allow online registration and consultation of the patents and copyrights.

THE NETHERLANDS

Protection of intellectual property is recognised as an important policy area in the Netherlands. Although no formal policy has yet been implemented, the period under review in this report was characterised by increased policy activity in this area. What is more, the area was identified as a priority area in the new EZ Budget.

Development of an IP system

In December 2001 EZ published a strategic policy investigation concerning the role of intellectual property in the Dutch knowledge-based economy.⁵ According to this report, the Dutch economy is becoming increasingly knowledge-intensive. More than ever before, future prosperity depends on the innovative capacity of Dutch business and industry, therefore the issue of IP is high on the agenda of policy-makers. The investigation gives the impetus for the direction in which the patent system ought to be developed (modernised) by exploring the question of achieving optimum balance between providing incentives for knowledge development via the protection of knowledge and preventing obstacles to the dissemination and 'free' use of knowledge.

The strategic policy investigation was presented to Parliament in December 2001. Follow-up actions in 2002 will consist to an important extent in conducting research programme into a number of practical dilemmas identified by the strategic policy investigation and discussions with international co-deciders. The formulation of a policy on the modernisation of the IP system has been delayed until December 2002.

IP policy in universities

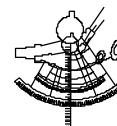
The development of an IP policy in universities in the Netherlands is proving to be a troublesome process. Firstly, the Cabinet dismissed the advice from the Advisory Council on Science & Technology Policy (AWT), dated June 2001, concerning patenting by universities.⁶ In their recommendations the AWT declared that universities should not give a lot of priority to building up and managing their own patent portfolios, an activity better left to companies. Only in exceptional cases would it be appropriate for the university itself to put in a patent application, and then only for a limited period of time.⁷ This advice was heavily criticised in both the Netherlands and abroad. Secondly, a meeting of the Platform Patent Policy in Universities, held during the second half of September 2001 and intended to formulate policy recommendations, was poorly attended and ended without results. It was not until June 2002 that the Platform came up with a concept version of policy recommendations, a number of which related to the conditional framework. The main recommendation states that:

- Patenting of results from publicly funded research seems to be only useful once business has expressed an interest in taking over the patent or applying for a licence.
- Making out a patent to a starter is an attractive way to protect results from public research. The starter should have a few years time to develop the invention, validate it and bring it to market. A patent made out to a starter offers increased opportunities for attracting venture capital.

⁵ Ministry of Economic Affairs, *"Intellectual Property and Innovation: concerning the role of intellectual property in the Dutch knowledge-based economy"*, The Hague: March 2002

⁶ See also Boekholt, P. and Lankhuizen, M. *"Monitoring, updating and disseminating developments in innovation and technology diffusion in the Member States"* - The TREND CHART: The Netherlands, Covering period: December 2000 – April 2001, April 2001

⁷ *Onderzoek Nederland*, no. 59, June 2001



However, these recommendations have met a lot of criticism from the universities. Moreover, there is no obligation attached to them. Final recommendations will not be produced before October 2002. Meanwhile it seems unlikely that universities will set aside financial resources for IP policy, given that they are facing new cutbacks imposed by the new government.⁸ The cutbacks have tempered the universities' ability and inclination to take up the issue of knowledge protection.

Meanwhile a recent OECD study has revealed that the commercialisation of patents of universities and public research institutes in the Netherlands is low. A licence agreement has been signed for only 19% of the university patents. Only 7% of university patents generate income at present, while for public research institutes the respective figures are 51% and 13%.⁹

NORWAY

The Norwegian Patent Office (NPO – *Styret for det industrielle rettsvern*) offers protection for inventions, trademarks and designs as well as information services, guidance and training in the area of industrial property rights. The annual budget in 2001 was about 154 million NOK (€19 million).

According to the State Budget¹⁰, the long-term goal of NPO is to finish the management of individual patent applications within three years, unless the applicant asks for faster progression. Today the average patent application process lasts five years. Another objective is to give the first preliminary pronouncement within six months; in 1999 this response time was 6.4 months.

The Patent Office is trying to reduce the amount of time taken up in managing applications. Unfortunately the backlog is growing and the Office does not believe it will be able to remedy the situation either this year or next. For more information on the Patent Office, see the Norwegian Trend Chart Report for May 2001.¹¹

Science parks

The Science Parks are actively helping university and college researchers in the patenting, developing and marketing of their inventions vis-à-vis industry.

PORTUGAL

Portugal's low patenting performance has been a source of concern to Portuguese authorities. It led to several actions in this field, already mentioned in earlier reports. INPI, the National Institute for Industrial Property (PT 14), was restructured with a view to take a more proactive stance in industrial property issues, and SIUPI, the Industrial Property Use Incentive System (PT 18), was launched under POE, aimed at encouraging companies to make increased use of industrial property mechanisms, namely patents.

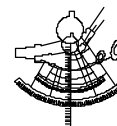
In the period under review the main action was the creation of the Industrial Property Support Offices (GAPI) Network (PT 26). These Offices are light structures designed to provide professional support on the use of industrial property rights while promoting awareness of the competitive advantages associated with industrial property. The network is connected with INPI's central office, enabling access to national and international information sources. The creation of GAPI offices forms part of a wider two-year project on 'Valorisation and Promotion of the Industrial Property System', supported by POE. It is being carried out by a partnership between INPI and other bodies, including associations of industrialists, science and technology parks, technological centres, and University-Industry interface associations. So far the network seems to be very active, not only in providing advice but also in building up awareness. Several GAPI workshops have been organised, involving managers, entrepreneurs, industry experts, researchers, and specialists in industrial property issues.

⁸ *Onderzoek Nederland*, no. 86, September 27, 2002

⁹ *Onderzoek Nederland*, no. 82, June 2002

¹⁰ St.prp.nr.1 2000-2001 Ministry of Industry and Trade, pp. 56

¹¹ Koch, Per M. *Monitoring, updating and disseminating developments in innovation and technology diffusion in the Member States - The TREND CHART: Norway, Covering period: November 2000 – April 2001, June 2001.*



It is, however, surprising that this topic is almost forgotten in PPCE. In fact, there is only one minor reference made to it in connection with the support to applied research consortia, aimed at 'creating new products and patents'¹². Information available on the IDEIA programme also refers to obtaining of patents rights as one of the objectives of the programme. The costs associated with the granting of industrial property rights are eligible for refunding support, while research consortia agreements should include a clear definition of the industrial property rights of partners stemming from research activities.

Under the new government, INPI was assigned a double reporting obligation with regard to the Ministry for the Economy and the Minister Assistant to the Prime Minister. The latter reporting obligation has raised some concerns, since the Minister is not only a member of the Advisory Council of INPI but also an official accredited agent for industrial property.

The process of revision of the Industrial Property Code is under way, and the government was given a legislative authorisation in this matter by the Parliament (Law 17/2002). Therefore a new Industrial Property Code is expected soon. Meanwhile, the Council of Ministers has approved new legislation regulating the activity of industrial property agents: a diploma in engineering, law or economics has again become a prerequisite for accreditation as an IP agent.

Finally, a whole issue of *Economia & Prospectiva*, a journal published by the Economic Studies and Prospective Office of the Ministry of Economy, was fully dedicated to industrial property issues. In the opening article, the President of the Republic, Jorge Sampaio, argues that "the policy of promoting the use of Industrial Property will only be effective if it will be able to instil the message that there is a clear trade-off: does one want to innovate, wasting the results of innovation investments – that is, allowing others to use them – or does one use the legal legitimacy to enjoy an exclusive use in order to better profit from the efforts undertaken in financial, human and technical resources as well as in scientific knowledge?"¹³.

SPAIN

During the past year significant changes have been made and new initiatives introduced that affect Industrial Property values and researchers in public systems. One highly important change concerns the modification to the patent application process in order to introduce the 'novelty examination designed to strengthen and add value to innovation and intellectual property.

In another new development, which accords with Royal Decree 55/2002 of 18 January 2002 (published in B.O.E. n° 26, 30/01/2002), researchers from public research organisations (OPI) will be able to share in profits obtained as a consequence of commercial exploitation or the cession of industrial property rights from their inventions. The main object of this regulatory change is to stimulate research and patent exploitation in Public Research Centres. In addition, this provides a clear incentive to researchers to achieve better scientific production levels. This new royal decree regulates the researcher's share of benefits in case of licensing, as follows:

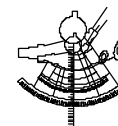
- one-third of benefits goes to the OPI organisation;
- one-third of benefits goes to the author of the invention;
- one-third will be shared in accordance with criteria established by the OPI board of management.

If the public research body does not apply for a patent, the researcher may submit an application and the OPI will seek to obtain a free exploitation licence and 20% of the benefits generated.

This Royal Decree is applied to the following OPIs: CSIC, CIEMAT, INIA, IEO, IGME, IAC, ISCIII, INTA, CEM and CEDEX.

¹² See section IV. 5, Council of Ministers Resolution n°. 103/2002, of 26 July.

¹³ Jorge Sampaio, "A valorização estratégica da propriedade industrial", *Economia & Prospectiva*, no. 19, Jan / Mar 2002, p. 12.



SWEDEN

According to Swedish law, researchers at universities retain 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 the 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 who advocate keeping ownership with individual researchers note that there is a potential conflict of interest between economic efficiency and traditional academic freedom of communication. Here they argue first that professors should not be coerced into secrecy agreements etc. against their will, and in the case where a researcher chose to commercialise results, the university should be able to monitor that he or she kept a proper balance between academic values and economic efficiency, rather than getting the university being involved as a party in any transaction. The issue of patent ownership in higher education institutions was raised in the Government Research Bill of September 2000¹⁴. The current government position is to wait for evaluation of the Danish experience, and this means that no legal changes are expected for another couple of years. VINNOVA was recently entrusted with a special government mission to propose better conditions for exploitation of research results. The IPR issue will be considered in that study.

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

The Swedish Patent and Registration Office (PRV) grants patents and registers trademarks, industrial designs and names. It also registers limited companies and other forms of companies that need to be registered. The office issues authorisation to publish periodicals, and offers a number of commission services and training courses. The more comprehensive activities performed by PRV have to be financed fully by the users/clients.

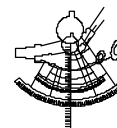
Apart from the PRV authorities there are very few other public schemes exclusively aimed at stimulating the use of the IPR instruments. However, as part of their general services in connection with seed financing, support for joint university-industry RTD programmes (VINNOVA, NUTEK, SIC etc) and financing in general (i.e. ALMI), some advice is given on the strategic and tactical use of IPR and on utilisation of information contained in patents. Several other agencies and research councils (e.g. the EU RTD Council) include training and advice activities regarding IPR matters in their general programme. They also offer partial funding of IPR expenditures, whenever necessary, after examining the total project concept.

UNITED KINGDOM

The Government is committed to ensuring that the intellectual property regime in both the UK and Europe continue to provide incentives to research and innovation. It is keen to deal effectively with the challenges to IPR policy posed by scientific advances in fields such as genome research, and those stemming from the increasing importance of information technology. Thus, in 2001, the Government established an Intellectual Property Advisory Committee to provide it with long-term strategic advice on the entire range of IP issues including patents, copyright, trademarks and designs. The committee also gives independent advice on identifying and responding to emerging and strategic issues¹⁵. Its particular areas of focus are:

¹⁴ Proposal 2000/01:3 Forskning och förnyelse (Government Bill - Research and Renewal)

¹⁵ See <http://www.intellectual-property.gov.uk/ipac>



- how IP can best contribute to Government objectives;
- risks and challenges to the working of the IP system;
- how to foster development of an international IP system which encourages innovation and benefits consumers while balancing the needs of IP producers and consumers, and large and small business;
- wider effects of IP policy, including competition questions, and issues which cause public concern;
- the impact of new technology;
- where consultation and/or research is needed;
- the recommendations of other Government advisory IP bodies, such as the Human Genetics Commission and the International Commission on Intellectual Property Rules.

In the meantime, the Patent Office is focusing on the following priorities as defined by the DTI's 2001 Science and Innovation Strategy:

- review of existing consultation processes and investigation of new ways to reach the widest possible range of interest;
- introduction of an affordable Community Patent;
- ratification of an international treaty to harmonise and deregulate the formal requirements for the acquisition and enforcement of patent rights;
- working towards the early introduction of a worldwide system for electronic trading in IPR and investment in IT to automate the UK IPR system; and
- working with the Small Business Service to ensure SMEs have ready access to information to help them obtain the protection they require.

During the period of this report, the Patent Office held a public consultation on grace periods, ending on 30 April 2002. 69 responses were received from individual inventors, academics, companies small and large, IP professionals and others. These are currently being analysed and the conclusions will be published in due course, together with a summary of the responses (unless people have specifically requested that their comments remain confidential).

Related to this issue, the DTI and the Patent Office have released an innovation logbook which provides a record of ownership of innovative ideas and contains notes and guidance on how to patent and protect intellectual property¹⁶. The Patent Office has also produced, in collaboration with AURIL and Universities UK¹⁷, a booklet entitled *Managing Intellectual Property - a guide to strategic decision-making in universities*. At the broader level, the Government also provides a dedicated online help service to promote the use and understanding of IP issues¹⁸.

BULGARIA

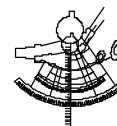
Bulgaria is co-operating with the World Intellectual Property Organisation (WIPO) in the modernisation of its intellectual property structure in order to increase the competitiveness of SMEs, industry, R&D and research organisations. The results of this co-operation should lead to entrepreneurs having a better awareness of the structures of intellectual property and also increase their share of patents used in production.

The Government drafted some amendments to the Copyright Law and neighbouring rights, which entered into force on 1 January 2002. Moreover, it plans to make further improvements in application and the protection this law gives.

¹⁶ For information, see: <http://www.InnovationLogbook.gov.uk>

¹⁷ AURIL, the Association for University Research and Industry Links, aims to develop partnerships based around research, technology transfer and related activities. 'Universities UK' is the representative body for UK universities in general in their relations with other fields of education, industry and government.

¹⁸ See: <http://www.intellectual-property.gov.uk/>



The number of cross-border controls on private imports has increased, and so too has the number of violations of trademark rights.

CZECH REPUBLIC

No measures have been introduced under this action line within the relevant period. However, the Government continues to view this area as an important focus for policy.

ESTONIA

Estonia has re-established its tradition in industrial property and has a genuine appreciation of the importance of industrial development. Estonian laws are well advanced on the protection of intellectual and industrial property rights and Estonia joined the European Patent Convention (EPC) as from 1 July 2002. Furthermore, Estonia is signatory to the main international treaties. During the last nine years the EPO has undertaken substantial technical co-operation projects with the Estonian Patent Office. Estonia has been a supporter and beneficiary of the Regional Industrial Property Program (RIPP), a programme run by the EPO on behalf of the European Commission for the development of industrial property in Central and Eastern Europe.

The Estonian Patent Office is the agency that handles applications for registering objects for legal protection of industrial property. The main problem for Estonian developers of innovative solutions remains the high cost of patenting abroad, as the State has no special facility to help finance the costs. Spin-off firms working closely with universities can receive assistance and advice from innovation support structures at the universities. The IPR arrangements of the universities are currently being reviewed during the restructuring process of innovation and technology centres.

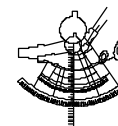
In the wider scope of protecting intellectual and industrial property in society, the outstanding problems concern law enforcement, local administrative capacity to fight piracy and the sales of counterfeit goods. According to a study by the research company Datamonitor, the value of software piracy amounted to 69% in 2000, and the Estonian market had to bear the costs of EEK 1.1 billion (about € 70.9 million). Although the share of piracy has dropped in comparison to the 1998 level of compared to 86%, it remains alarmingly high above the EU average of 34%, or 29% in neighbouring Finland.

Since the end of 2000 the Government has made a concerted effort and has increased its raids on market places known for selling counterfeit goods. Similar operations have been introduced at border crossings to reduce smuggling, including counterfeit goods. A special task force has been set up to aid the Tallinn Police Office to fight piracy. Customs officials and economic police officials are currently being trained in how to detect counterfeit; this is done in co-operation with organisations representing intellectual property rights.

HUNGARY

An amendment in 1999 to the Hungarian Patent Act (Act XXXIII of 1995 on the protection of inventions by patents) by Article 3 of Act CXIX of 1999 has resulted in the reinforcement and extension of the competence of the Hungarian Patent Office (HPO). As a result of the amendment, the HPO has become the administrative authority for the protection of intellectual property rights with nationwide competence, deriving its independent functions and competence from direction by the Government. Its President is appointed by the Prime Minister.

After the confirmation of the HPO's legal status and the enlargement of its competence through this amendment, Government Decree 86/2000 (VI.15.) was adopted which defines the tasks, competence, organisation and direction of the HPO. In this context, the Organisational and Operational Rules were also renewed. New Rules were approved on behalf of the Government by the Minister of Economic Affairs, and were published on the order of the President in the HPO's official bulletin. The Rules



entered into force on 1 December 2000. In December 2000, the Hungarian Council for the Protection of Intellectual Property was set up as a result of the new statutes and Rules. This institutional reform allows the HPO to operate and prepare for European integration with clear and enlarged competencies.

LATVIA

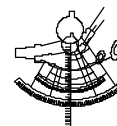
The preparation of legislative acts for the protection of intellectual property comes under the responsibility of the Parliament, the Cabinet of Ministers and the European Integration Bureau within the Ministry of Foreign Affairs. At present, the Ministry of Culture is coordinating the enforcement of intellectual property rights, but other institutions such as the National Patent Office, the fraud and tax squad, customs, the prosecutors' general office, film Register, Latvian music producers' association and authors' collecting society are also involved.

As early as 1992 the Government adapted a decision on the provisional transitional schedule for the protection of industrial property rights. In 1993, Latvia joined the convention that established the World Intellectual Property Organisation, re-established its membership of the Paris Union by way of accession to the Stockholm Act 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. On 11 May 2000 the Copyright Law was adopted (coming into force in 11 May 2000). Since August 1999, Latvia has been a member of the *Rome Convention for the protection of performers, producers of phonograms and broadcasting organisations*. In March 2000, Latvia joined the *WIPO Copyright Treaty* and *WIPO Performances and Phonograms Treaty*. In May 2000, the Parliament also adopted amendments to the Criminal Law, related to copyright protection. In March 2000, the Government adopted the revised Corruption Prevention Programme. The law On the Protection of Data of Natural Persons was adopted in March 2000 in order to develop a basis for effective and secure system of natural persons' data protection.

The National Concept on Innovation (LV 20) was adopted by the Cabinet of Ministers in February 2001. It highlights entrepreneurship as one of the four basic components of the National Innovation System. The concept states that the national legislation base must be strengthened within the field of intellectual property, taking into account international trends and practice, principles and requirements of international organisations. On 28 July 2001 the Provision "On the order in which customs must take actions for protecting intellectual property" (LV 37) was adopted by the parliament. The major purpose of the legislation is to create a solid system for protecting intellectual property at custom checkpoints. On 18 May 2001 the Government adopted a measure "On a work group implementing the concept of e-commerce" (LV 31) to create a work group that will implement the e-commerce concept, adopted earlier this year. Within the larger e-Latvia programme, "The Electronic Administration Concept: strategic plan for Government administration modernisation" (e-Government) has been adopted. The Government of Latvia has set a priority goal and its mission is the modernisation of bureaucracy and the implementation of e-administration, based on IT potential and E-commerce principles, therefore ensuring high quality services and their application in society. The document states that innovation is one of its top values during the implementation process.

LITHUANIA

The protection of intellectual property is quite well developed in Lithuania; at least the legislation is sufficient. Lithuania is a member of WIPO and PCT. Moreover, it is a party to the Bern and Paris convention, as well as TRIPS. Each of the spheres of intellectual property (copyright, patents, industrial design and trademark) has a regulating law. The level of actual protection of intellectual property is also increasing. More and more enterprises use legal software, the Lithuanian patent bureau is continuing to operate in registering the industrial property objects. No further steps were taken in this field.



POLAND

After a long period of steady decline, the number of resident patent applications filed at the Patent Office of the Republic of Poland took an upturn in 2000 and was, for the first time in the 1990s decade, significantly higher than in the previous year (respectively 2 404 and 2 285).

The Polish balance of patents shows a significant deficit. In the recent years the number of patent applications filed by Polish inventors abroad is about 2.5 times lower than the number of patent applications filed at the Patent Office of the Republic of Poland by foreign applicants.

There is also been visible improvement as regards to trademarks and copyrights. 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 activities such as:

- attempts to convince the public that the goods or services originate from elsewhere than the true producer or supplier;
- damage to the company image by providing unverified information or publishing its trade or technological secrets.

ROMANIA

The Law of 8 June 1996 regarding Intellectual Property set up the Romanian Office for Intellectual Property (ROIP), (formerly called the Romanian Agency for Protecting Intellectual Property). ROIP is a specialised agency working directly under the Romanian Government and financed from the state budget. Regarding the legislation to be adopted under the *acquis communautaire* directives, most of the legislation is already in place, and full harmonisation will be achieved in 2004. According to the Business Software Alliance and the General Police Department, the software piracy rate in 2000 was about 77% in Romania. This figure places Romania in the top tier of computer offenders worldwide. The most frequent offence is the illegal use of computer programmes by business entities.

In a World Bank report on the transition of Eastern European countries, one recommendation refers to protecting property ownership and contract rights. More than 80% of companies in 13 countries report that they are not adequately informed of the changes in rules that affect them before these rules are adopted. According to an EBRD report, the insecurity of property rights in the Romanian economy rose to more than 40%. A survey of manufacturing enterprises in Romania found that enterprises with the least secure property rights invested nearly 40% less than those with the most secure rights. The percentage of companies complaining that they are seldom or never consulted about new rules and law reached more than 95% in Romania¹⁹.

SLOVAKIA

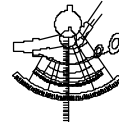
No measures have been introduced under this action line within the relevant period. However, the government continues to consider this area as an important focus for policy.

On 20 June 2002, the National Council adopted Act No. 444/2002 No on Designs. By adopting this act, Council Directive 98/71/EC on the legal protection of designs was incorporated. The act will enter into force on 1 October 2002.

With the aim of clarifying certain elements of patent law, on 26 June 2002 the National Council adopted Act No. 402/2002 Coll. amending and supplementing Act No. 435/2001 Coll. on Patents, Supplementary Protective Certificates and on Amendment and Supplementation of Certain Laws (Patent Law). This amendment entered into force on 1 August 2002.

¹⁹

Bucharest Business Week, January 21-27, 2002



Act No. 577/2001 Coll., which amended and supplemented Act No. 55/1997 Coll. on Trade marks, came into effect on 1 January 2002. This act eliminated the shortcomings related to the implementation of Council Directive 89/104/EEC of 21 December 1988 to approximate the laws of the Member States relating to trade marks.

The National Council has passed Act No. 271/2001 Coll. on Measures Relating to Import, Export and Re-export of Goods that Violate Intellectual Property Rights, which entered into force on 1 August 2001. This act provides sufficient protection of the internal market from imports of counterfeit goods.

In the field of industrial property, Act No. 435/2001 Coll. on Patents, Supplementary Protection Certificates and on Amendment and Supplementation of Certain Laws (the Patent Law) was adopted. The act entered into force on 1 November 2001 and also covers the issue of the European Patent Application and European Patent. The provisions related to the European Patent and supplementary protective certificates entered into force on 1 July 2002.

Within the framework of re-codifying the patent law, the legislation on patents was separated from the legislation on industrial designs. The draft act on designs, whose objective is to incorporate Council Directive 98/71/EC on the legal protection of designs, is currently in the legislative process. This act is expected to enter into force on 1 October 2002.

SLOVENIA

No measures have been introduced under this action line within the relevant period. However, the Government continues to consider this area as an important focus for policy.

The Slovenian Intellectual Property office continues to operate within the Ministry of Economy, ensuring the basic incentive framework for intellectual property.

European Trend Chart on Innovation

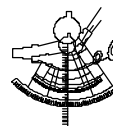
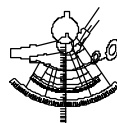


Table 1: Categorisation of IPR policy measures by mode and target.

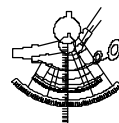
			Modes								Targets							
			Intermediation/development of cooperation	Services/Consultancy/Training	Awareness raising & management of IPR	Subsidies for acquisition of IPR/research	Support for IPR development/registration	Valorisation/promotion of research results	Legal environment		Other	SMEs/Industrial SMEs	Companies/Industrial companies	Managers	Individuals	Research institutes/Researchers	Students/Graduates	Public Authorities/Organisations
Country	Instruments	Date																
Austria	AT 16 TecMa	1998	1	1							1							
Austria			1	1	0	0	0	0	0		1	0	0	0	0	0	0	0
Belgium	BE 5 OPRI-DIE - Office for Intellectual Property	?			1						1	1	1		1			
Belgium	BE 10 Support for immaterial investment	?				1						1						
Belgium	BE 18 University Interfaces	1998					1				1							1
Belgium	BE 45 IPR to Universities	1998				1									1			1
Belgium	BE 47 University Interfaces	1998					1	1				1	1					1
Belgium	BE 50 Support for immaterial investment	1971				1						1	1		1			
Belgium			0	0	1	3	2	1	0		2	4	3	0	1	2	0	3
Denmark	DK 10 IPscore®	2000		1	1							1	1				1	
Denmark			0	1	1	0	0	0	0		0	1	1	0	0	0	1	0
Finland	FI 9 Improving the use of research results at universities	1999						1										1
Finland			0	0	0	0	0	1	0		0	0	0	0	0	0	0	1
France	FR 32 INPI's Innovation Awards	1991						1				1			1			
France	FR 34 RIAM (Research and Innovation for Audiovisual and Multimedia)	2001	1				1				1	1	1		1			

European Trend Chart on Innovation



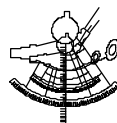
France	FR 37 RMNT (French Research Network in Micro and Nano Technologies)	1999	1									1			1					
France	FR 38 RNTL (National Network of Research and Software Innovation Technologies)	2000	1									1	1		1			1		
France	FR 39 RNMP (National Network for Materials and Process)	2000	1																	
France	FR 40 RITEAU (Research Innovation Technology Network Water and Environment Technologies)	2000	1									1	1		1			1		
France	FR 41 PACO (New Energies and Fuel Cells)	1999	1									1	1		1			1		
France	FR 42 GenHomme (Human Genetics and medical Innovation Network)	2000	1					1												
France	FR 43 RNTS (National Network for Health Technologies)	2000	1		1															
France	FR 44 PREDIT	2002																		
France	FR 45 RITMER (Research and Innovation Network for Accidental Maritime Pollution)	?																		
France	FR 46 RGC&U (Civil and Urban Engineering Network)	1998	1									1	1		1			1		
France	FR 47 Supersonique	2000																		
France	FR 48 Genoplante	1999																		
France	FR 49 Terre et Espace	2000										1	1		1			1		
France	FR 50 RARE (Network of Research and Innovation Technology on Feeding Reference Europe)	1999	1									1	1	1		1		1		
France			10	0	1	0	1	2	0			2	8	8	0	0	9	0	0	6
Germany	DE 6 Promotion of Inventors at the Patent Office for German Research	1955					1					1			1	1				
Germany	DE 7 Information Centres	1980		1								1	1	1		1	1	1	1	
Germany	DE 24 INSTI - IPR promotion	1994		1			1					1	1		1	1		1		
Germany	DE 48 INSTI - IPR at Higher Education	1996		1	1							1	1	1	1			1		
Germany	DE 59 Institutional and Employment-related Reforms in Higher Education Institutions	2001						1	1									1	1	
Germany	DE 72 Commercialisation of Intellectual Property in Public Science	2001	1				1	1				1				1		1	1	
Germany			1	3	1	0	3	2	1			3	4	3	1	3	4	1	3	5

European Trend Chart on Innovation



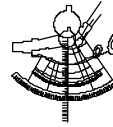
Greece	GR 1 Investment Law - Innovation	1994					1				1	1							
Greece	GR 34 Law 2697 "Certification of the Locarno settlement on the International classification of Industrial Design and Models	1999						1			1	1							
Greece	GR 42 Awards and Financial Support for Inventors	2000					1							1					
Greece			0	0	0	0	2	0	1		0	2	2	0	0	1	0	0	0
Ireland	IE 6 Protection of Copyright - Copyright Bill	?							1			1	1		1				
Ireland			0	0	0	0	0	0	1		0	1	1	0	1	0	0	0	0
Italy	IT 28 Protection of Copyright - Copyright Bill	1999							1		1	1							
Italy			0	0	0	0	0	0	1		1	1	0	0	0	0	0	0	0
Luxembourg	LU 3 Technology Watch Centre (CVT)	1994		1	1							1	1						
Luxembourg	LU 11 Short term patent	2001			1		1					1							
Luxembourg			0	1	2	0	1	0	0		0	2	1	0	0	0	0	0	0
Norway	NO 17 Assistance – Applications for Patents in Norway and Abroad – In Development/Prototype	?		1			1					1	1		1				
Norway			0	1	0	0	1	0	0		0	1	1	0	1	0	0	0	0
Portugal	PT 14 Restructuring of the National Institute for Industry Property (INPI)	1998			1				1						1		1		
Portugal	PT 18 Industrial Property Use Incentive System (SIUPI)	2000					1	1			1		1		1	1			
Portugal	PT 26 Industrial Property Support Offices (GAPI)	2001		1	1						1	1	1		1		1	1	
Portugal			0	1	2	0	1	1	1		2	1	2	0	1	3	0	2	1
UK	UK 2 In-house presentations to larger companies to raise awareness amongst businesses	1997		1								1	1						
UK	UK 13 Intermediaries' Workshops	1997		1							1								
UK	UK 14 Project with Bournemouth University	1997			1											1			
UK	UK 15 Projects with Association for University Research and Industrial Links (AURIL)	1997							1		1								
UK	UK 16 Work with PR Company	1994							1		1	1	1						

European Trend Chart on Innovation



UK	UK 17 Central Enquiry Unit (CEU), Internet Website, Publicity Literature	1995		1							1	1		1					
UK	UK 25 Abolition of patent fees	1998					1		1		1	1							
UK	UK 33 Reform of the taxation of intellectual property	2000							1										
UK	UK 37 The Biotechnology Exploitation Platform Challenge (BEP Challenge)	1999					1			1									
UK	UK 45 Intellectual Property (IP) Portal	2000			1					1	1	1	1	1	1			1	
UK	UK 48 Database of Technology Offers	2001	1		1						1	1	1		1	1	1	1	
UK			1	3	3	0	1	1	4		5	6	6	2	2	2	2	1	2
Slovenia	SL 1 Young Researchers Programme	1985				1											1		
Slovenia			0	0	0	1	0	0	0		0	0	0	0	0	0	1	0	0
Cyprus	CY 4 Law 16(I)/98, No. 3234 Patent Law and amendment under No. 21(1) of 1999	1998							1						1				
Cyprus			0	0	0	0	0	0	1		0	0	0	0	0	1	0	0	0
Latvia	LV 31 Working group to implement the concept of e-commerce	2001							1		1								
Latvia	LV 37 Order of actions to be taken by customs for protecting intellectual property	2001							1		1								
Latvia	LV 40 Electronic Administration Concept: strategic plan for modernisation of government administration	?							1		1							1	
Latvia	LV 42 Commercial Law – on its entry into Force	?							1		1								
Latvia	LV 47 Rules on the standard of the state Academic Education	?																1	
Latvia	LV 50 Regulation on Council for Sustainable Development	?																	
Latvia			0	0	0	0	0	0	4		4	0	0	0	0	0	0	2	0
Lithuania	LT 9 Law on Protection of Intellectual property in import and export of goods	2000							1						1				
Lithuania	LT 14 Measures for implementation of the Government's programme for 2001-2004	2001							1		1								
Lithuania			0	0	0	0	0	0	2		1	0	0	0	1	0	0	0	0

European Trend Chart on Innovation



Austria																			
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Norway																			
Portugal																			
UK																			
Slovenia																			
Cyprus																			
Latvia																			
Lithuania																			
Totals																			