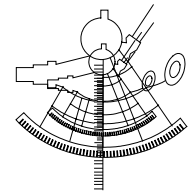
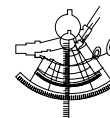


European Trend Chart on Innovation



Thematic Report IPR and Innovation

Covering period: October 2002 – September 2003



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:

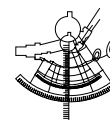
- a database of policy measures across Europe;
- a 'who is who?' of agencies and government departments involved in innovation;
- a series of six-monthly country reports for all countries covered;
- a series of six-monthly trend reports covered on each of the four main themes;
- a number of benchmarking 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**, **Marco Jaso** (PREST) 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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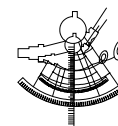
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Executive Summary

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 October 2002 – September 2003. 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.

There is strong evidence that the EU member countries 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. Despite the time elapsed since the report by Cameron (2000), it is evident that there is still 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, the field of IPR continues to shift away from being 'a rather specialised and often obscure legal discipline, even within companies, into the mainstream of innovation policy'.

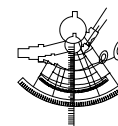
For consistency, the innovation support measures related to the field of IPR programmes, reported in the datasheets provided by the Trend Chart country correspondents, have been analysed using a framework similar to those used in previous reports on this topic. This is based on a classification according 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). The following modalities are 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 cost.
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 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.

Nine categories of target are also 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.

The analysis shows that governments have placed most effort in providing support for the development of IPR. Intermediation and awareness raising form the next largest categories of policy intervention. The most direct approach, that of subsidising the acquisition of IP, forms the least common modality. More recently introduced measures also tend to focus on the support for IPR development, awareness raising and the creation of intermediaries, whilst the amendment of legal frameworks appears to have slightly declined in importance.



In terms of the targets for innovation support policy mechanisms in this area, 'industrial companies' and SMEs form the joint largest categories. 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, with universities and research institutes increasing in importance alongside SMEs.

In terms of IPR as a policy priority, in all groups of countries the issue of IPR-related innovation policy has become much more important, relative to other policy areas, over the last four years. 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 is approaching the EU level in the Accession States, although the most recent data indicates a slight falling off in this trend.

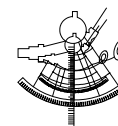
The report then presents a review of the qualitative information provided in the Trend Chart Country Reports (September 2003). This indicates a number of general trends which accord with the findings of the analysis of modalities. Overall, the general trends mirror those identified in previous reports 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 of the IPR infrastructure
- reform of legislation concerning IPR
- introduction of specific public measures
- the significance of IPR (and the need for clear understanding and structures concerning its ownership) in the 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 2003).



'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 October 2002 – September 2003. The report uses a similar framework of analysis to that used in previous reporting periods, particularly that set out in Cameron (2000)¹ and in Cunningham *et al.* (2002)² and essentially provides an update on the results reported in the latter. 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.

The emergence of what has been termed the 'knowledge economy' over the last few years implicitly stresses the importance of the role of knowledge in the innovation process. Although some authors have questioned whether knowledge indeed plays a greater role now than it did in the innovative processes of the previous two centuries, it is clear that the handling of knowledge, the growth of information systems and the realisation that knowledge can be treated as a commodity and, hence, has an intrinsic value, have all contributed to the prominence of intellectual property and the development of policies which seek both its protection and exploitation.

The understanding that intellectual property can be owned by its creator and can therefore be legally protected in the same way as physical property has been used to grant inventors the right to own their creativity and innovation, to control its use and to be rewarded for it. Generally, companies have recognised that IP protection plays an important role in the development or maintenance of competitive advantage and thus IPR is treated as an important element in their innovation management. However, the extension of these simple principles to the development of new processes and services, for example, rather than new products, is less straightforward. Areas such as software and genetic code have generated policy and ethical problems.

Thus the importance of the role of IPR in innovation is clearly recognised, although as indicated by Lengrand *et al.*,³ much of the supporting analysis derives from the patent system and company strategies on patent acquisition and 'the use of copyright rules to limit the behaviour of other agents requires careful appraisal in terms of impacts on innovation'.

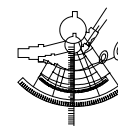
Public policy makers also recognise intellectual property rights as an essential feature of a successful, innovative economy, although there is a danger that innovation may be equated directly with the production of intellectual property (which can be measured at an aggregate level as patenting activity) whilst intangible factors such as creativity and design remain unquantified. Thus the intangible nature of intellectual property poses new legislative and regulatory policy problems for its protection. Caution is also required in areas such as government moves to promote the commercialisation of intellectual property from the public sector to the possible detriment of other responsibilities in that sector (e.g. long-term strategic research in government laboratories, teaching and training activities in universities).

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. As signalled above, policies have also been addressed towards specific sectors or problem areas, such as genetic

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

² Cunningham, P.N., Cameron, H., Kyrtoudis, J. and Luxembourger, H. *The European Trend Chart on Innovation, Thematic Report 'Innovation and IPR'*, October 2002.

³ Louis Lengrand and Associates, PREST (University of Manchester) and ANRT (France), (2002) *Innovation Tomorrow: Innovation policy and the regulatory framework: Making innovation an integral part of the broader structural agenda*, Innovation Paper No. 28, EUR 17052, Directorate-General for Enterprise, European Commission.



engineering and computer software. More recently, the Commission has identified the need to simplify IPR systems, stating that:

“The patent system must under no circumstances act as a further brake on the competitiveness of European companies. Ease of obtaining patents, legal certainty, and appropriate geographic coverage: these are all essential criteria for the effective protection of innovation in the European Union.”⁴

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 accession countries, which are currently negotiating their entry into the European Union. There are clear signs that these countries have begun 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, which in turn place demands 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.

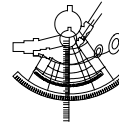
Another key feature of the new knowledge is that it is relatively expensive to produce but may be copied easily and at a fraction of the cost, although it can also be argued that, in order to fully capture new knowledge, economies must have developed their own absorptive capacity through the provision of trained scientific and technical personnel. Nevertheless, it is essential, at all levels of innovation, for the producers of knowledge to 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-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.”

Finally, it is useful to note that IPR instruments actually cover a diverse array of forms⁵. One of the most widely recognised instruments is the patent (an instrument which is particularly attractive to those interested in monitoring the outputs of the R&D process as it is captured in patent statistics). These offer inventors exclusive rights to make, use and sell their inventions. Paradoxically, they both protect the invention and at the same time make public the knowledge which underpins it. As a result, patenting behaviour exhibits a high degree of structural and cultural variability between sectors, firms and inventors. Recent debate on the extension of patenting to ‘soft’ innovative products such as software, business processes and even genetic material has been extensive and is likely to increase given their commercial potential. Copyright forms another instrument and is applied to symbolic material such as software, texts and diagrams. The rapid increase in electronic forms of information and the ease with which they may be reproduced and disseminated has stimulated debate over this area of IPR. Lengrand (2002) et al. also note that innovative material may be covered by design rights and that, while trademarks may not necessarily be applied to innovations, innovative products are typically trademarked – a process that has been used by some researchers to indicate areas of innovative activity or firms. Lastly, it is also noted that the intellectual capital of an organisation may not always be protected through IPR instruments, especially in the case of small firms and a range of organisational practices, employment regulations and practical protection devices (e.g. copy-protection) may be applied instead.

Lengrand, et al. identify a number of drivers and pressures operating on IPR policy frameworks. Of particular relevance is the widespread piracy of electronic media (software, recorded music, etc.); this report shows that several accession countries are acutely aware of this problem and are in the process of taking steps to mitigate the commercial impact of these practices. With the ongoing

⁴ European Commission (1997), Green paper on the Community Patent and patent system in Europe, COM (97) 314 final 24 June 1997.

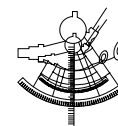
⁵ The following section is largely taken from Lengrand, et al., op. cit.



enlargement process, it is unlikely that this issue will decline in importance. Other issues or problems noted concern:

- The complexity of IPR systems;
- Technical innovations which cannot be dealt with by conventional patenting systems (i.e. process elements);
- Disputes over the protection of technical innovations by conventional mechanisms (i.e. genome sequences, etc.);
- The rapid pace of change in technical knowledge;
- Increased ease of reproducing and disseminating informational products facilitated by ICT developments;
- Increased interest in the use of IP data as a source of commercial intelligence.

Faced with these pressures, it is clear that European governments must develop considered strategies in the area of IPR policy: strategies that must be designed carefully to maximise the commercial potential of research conducted within their systems of innovation (be they regional, national or supra-national) and which do not hinder the innovative process itself.



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, the following warning should be noted. In the area of innovation-related IPR issues, the problem of defining a 'support measure' becomes possibly more problematic than in any other Action Line. Whilst 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 or activities may be ongoing but individually (and also collectively) these cannot 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. Similarly, the absence of any specific measures in the area of IPR policy does not imply that the issue of IPR is not present on the national innovation policy agenda of any specific country.

For consistency, the innovation support measures related to the field of IPR programmes, reported in the datasheets provided by the Trend Chart country correspondents, have been analysed using a framework similar to those used in previous reports on this topic⁶. 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).

It is evident that there are several ways in which national governments may influence the production (and commercialisation) of intellectual property. These may operate at various stages of the patenting process and include:

- improving awareness of benefits of IP protection and IP strategies;
- reducing financial barriers;
- production of guidelines or regulatory frameworks for IP handling;
- assisting in the patenting process (e.g. researching on patents, registration and filing);
- offering greater protection against IP infringement, piracy etc.

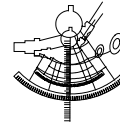
Based on these broad categories, it is possible to define a number of modalities by which the measures introduced by the national governments covered by the Trend Chart seek to influence IP activities.

2.1 Modalities

The modes of action of the measures presented are derived from information provided in the Trend Chart datasheets (datasheet section 1.3.c 'mode of delivery of action'). Analysis of this information, using the framework outlined above, provides the following seven categories:

1. **Intermediation/development of cooperation:** agencies facilitating contact between different actors (investors, companies, researchers), grants to promote cooperation, websites, etc.
2. **Services/consultancy/training:** training/courses on IPR, help for registration, consultancy services, free or at low rates.
3. **Awareness raising:** awareness raising and explanation of the importance of patents for a company, institute, individual, increasing knowledge about IP in general.
4. **Subsidies for IPR acquisition:** subsidies for companies making research with a view to finding innovating projects and 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 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, and Cunningham, P.N., Cameron, H., Kyrtsoydis, J. and Luxembourg, H. *The European Trend Chart on Innovation, Thematic Report 'Innovation and IPR'*, October 2002.



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, etc.

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

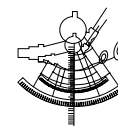
As can be seen, these categories lie along a spectrum of support measures from the indirect promotion of awareness of the importance of IPR, through the improvement of the regulatory framework for IPR, and the establishment of intermediaries and advisory services for IPR issues, to direct support for 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:

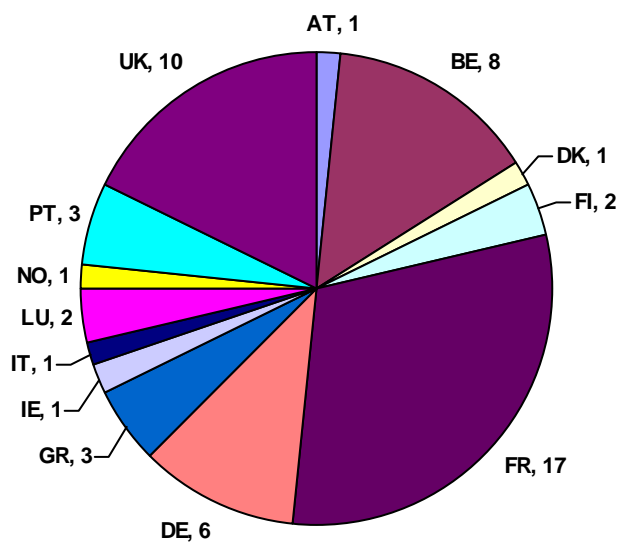
1. SMEs/industrial SMEs
2. Companies/industrial companies
3. Managers
4. Individuals
5. Research institutes and researchers
6. Students/graduates
7. Public authorities/organisations
8. Universities
9. Other.

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 (see end of report) provides an overall categorisation of all extant (as of September 2003) 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 was operationalised. The following analyses cover only the results for the EU Member States together with Norway and Cyprus (hereafter referred to as the EU15+). Some 56 measures having an impact on IPR issues are reported – distributed as shown below. Iceland, Israel and Liechtenstein report no relevant measures in this Action Line.



Meanwhile, the economic and structural situation in the countries of Central and Eastern Europe (CEE) makes any comparison with EU Member States invalid. In the event, however, only Latvia and Lithuania report any relevant measures.

3.1 Modalities: Overall distribution

From the following graph (Figure 1) it appears that in the EU15+ countries covered by the Trend Chart, governments have placed most effort in providing support for the development of IPR. Intermediation and awareness raising take second and third place. Unsurprisingly, the payment of direct subsidies for the acquisition of IPR is the least common modality. The prominence of measures supporting the development of IPR is somewhat unexpected as many governments have moved towards indirect modes for innovation support. However, this result may be an artefact caused by the absence of a commonly accepted definition for ‘innovation support measures’. Moreover, support measures for IPR development are frequently targeted at sectors or company types, whilst less direct measures, particularly those dealing with awareness raising, are by their very nature broader and more generic.

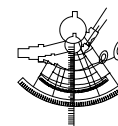
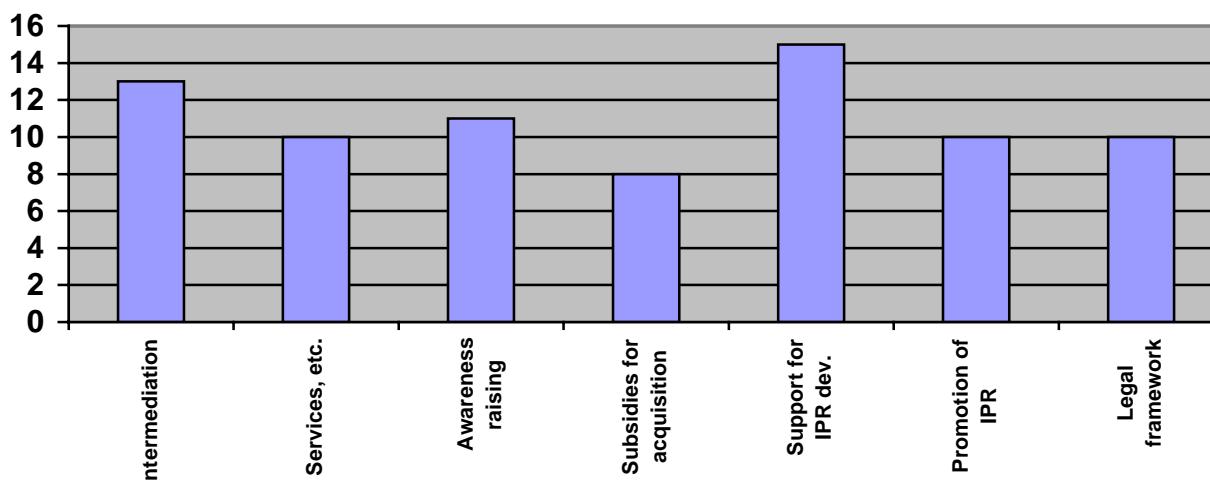


Figure 1: Distribution of IP support ‘effort’ by mode of action (EU15+).



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. The prevalence of measures which address the legal framework for IPR is explained by moves towards the adoption of the Community Patent and also by more focused attention being paid to the role of IP produced by public sector institutes (especially higher education institutes) and related efforts to increase the commercialisation of such IP. 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.

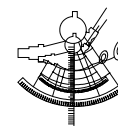
All the measures reported by the CEE countries focus on the legal environment modality, generally in the context of the Community Patent or other international patent and copyright agreements and regimes.

As already indicated above, it should be noted 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:

- the 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 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 objectives⁷. This issue is dealt with further in Section 3.5.

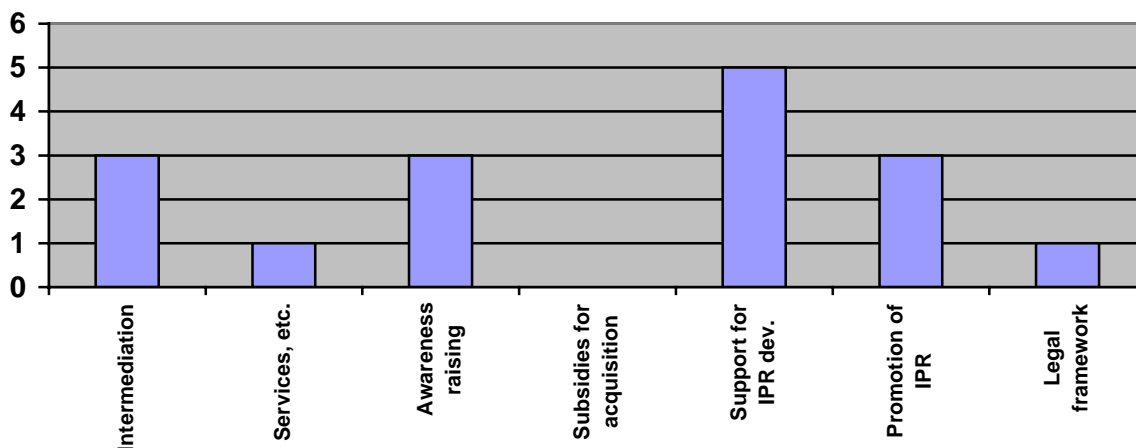
⁷ Note on the use of Priorities Tables: It should be emphasised that the priorities table is a very simple device intended to illuminate trends and differences between and across Member States. The table is meant to convey a sense of which Action Lines are viewed as important in terms of national policy formulation, and to reflect the relative amounts of ‘effort’ expended on the promotion of measures dealing with that Action Line. ‘Effort’ is an all-inclusive term incorporating funding and the allocation of other resources (e.g. staff resources, restructuring, etc.), government statements of intent or interest (e.g. specific studies), publicity and more general rhetoric. It should also be noted that policies might include both (a) activities already put in place and (b) activities to be developed in the future. The scoring system used in the table is probably best described as ‘a snap-shot of the relative importance of particular Action Lines as perceived by national policy makers’. It should be noted that new or emerging policy areas are not necessarily priorities – viewed over time, the priority ranking tables should be able to reflect the



3.2 Modalities: Recent trends

The above analysis is based on all the current measures reported in the datasheets for the EU15+. However, several measures in support of this Action Line have been in place for a number of years, back as far as the 1950s, in one case. In order to determine any recent trends in IP-related innovation policy support, the analysis was repeated for measures starting in 2001 and thereafter (few measures have been introduced in 2003, hence an analysis of these alone would contribute little to the overall picture⁸). The datasheets indicate that ten relevant measures have been introduced in the EU15+ since 2001. 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, 2002 and 2003 (EU15+).

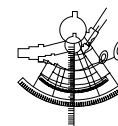


Again, support for IPR development, awareness raising, the creation of intermediaries and the promotion/valorisation of IPR are the most frequent modalities, whilst measures concerning the legal framework have become less frequent. No general conclusion can be drawn for these results other than that already put forward for the overall analysis above.

growth in importance of a policy area. Obviously the system is ultimately a subjective indicator. Some caution is required when analysing any reported shifts in priorities. An increase in relative priority (a higher 'score') is likely to be a true reflection of an active shift in national policy focus. However, any such increase in relative priority must be balanced by a decrease in other Action Lines. Thus some apparent decreases in relative priority are likely to be due to passive adjustments rather than an active policy shift.

It should also be noted that the occurrence of a low relative priority score does not necessarily imply that a particular Action Line is considered to be unimportant. For example, 'intensified cooperation between research, universities and companies' can be regarded as an important aspect of national innovation policy but it may be the case that the national infrastructure is already sufficiently developed in regard to this issue and, therefore, no active policy to further improve it is required. In this case, the Action Line would receive a low priority. The use of zeroes does not necessarily imply the absence of activity or policy concern – rather, the area is merely less of a priority than others.

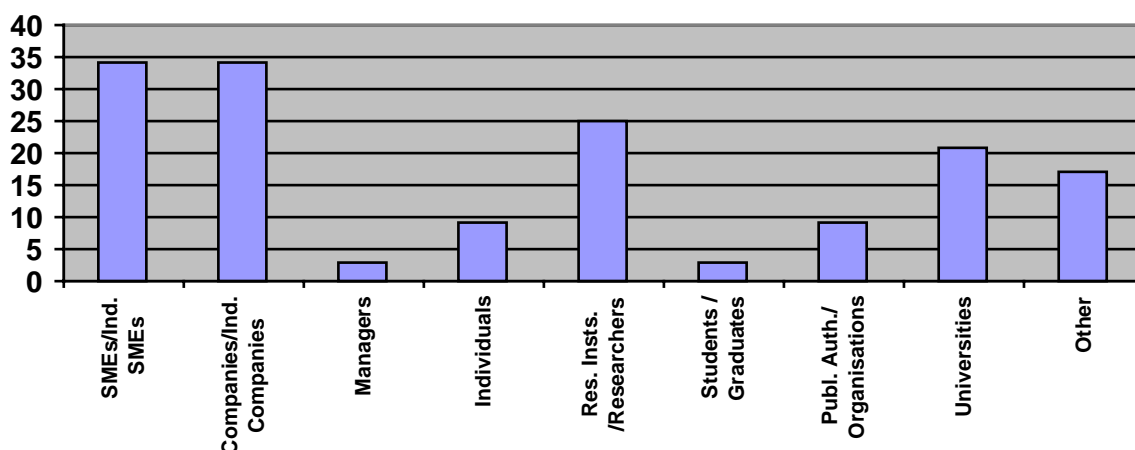
⁸ In fact, it appears that only one measure has been introduced since the last report in this series in October 2002



3.3 Targets: Overall distribution

Figure 3 illustrates the distribution of extant IPR measures according to target type. As may be seen, and as might be expected, ‘industrial companies’ and SMEs form the largest target categories. As the former category is also likely to include SMEs, this latter group appears to form the main objective for many IPR-related innovation support measures. The protection of IP is a particular concern in new technology-based companies, start-ups and with entrepreneurs, especially where lack of awareness and information, and the comparatively high costs of IP registration are likely barriers to commercialisation which may explain this finding.

Figure 3: IPR measures and targets (EU15+)



Research Institutes and researchers, and Universities form the third and fourth largest target categories, which supports more general observations that many governments are increasing their efforts to see the results of research in the public sector transformed into commercial products, processes and services.

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.

The results indicate that SMEs, and public sector research institutes (including HEIs) again form the predominant targets for recently introduced measures under the IPR Action Line.

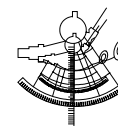
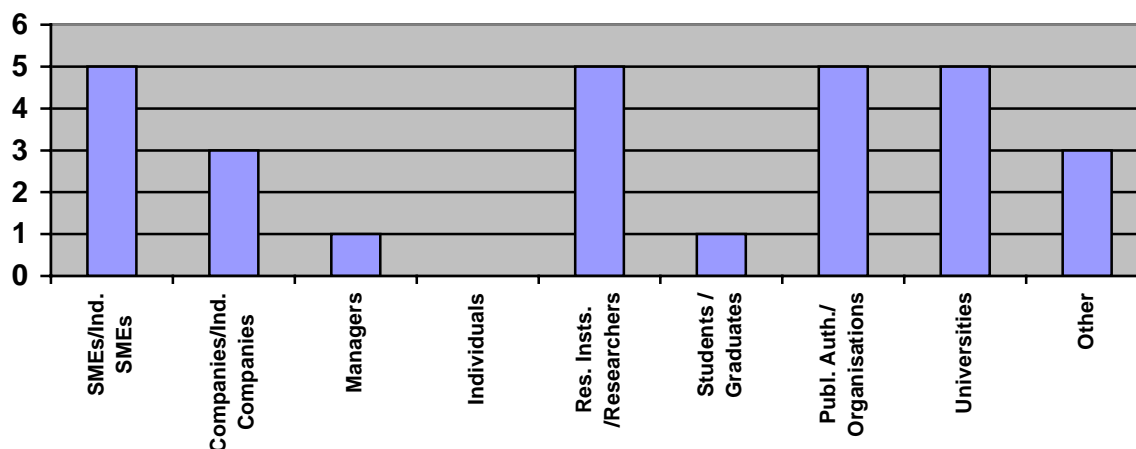


Figure 4: Targets of IPR measures introduced in 2001, 2002 and 2003 (EU15+).

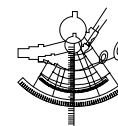


3.5 Analysis of IPR policy priorities

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 2003 series of Country Reports presents policy priorities tables for July 2000, September 2001, September 2002 and August 2003. Table 2 below presents the respective priority points for each country and each period.

Action Line II.2. Protection of intellectual and industrial property	July 2000	Sept 2001	Sept 2002	August 2003
Austria	2	2	2	3
Belgium	1	1	1	1
Denmark	0	3	2	2
Finland	2	2	4	3
France	2	2	2	2
Germany	1	2	2	2
Greece	2	1	1	2
Ireland	2	2	2	3
Italy	2	2	2	2
Luxembourg	2	3	3	3
Netherlands	2	2	3	3
Portugal	2	2	2	2
Spain	1	2	2	3
Sweden	2	2	2	2
United Kingdom	1	3	3	2
Cyprus	2	1	1	1
Iceland	-	2	3	3
Israel	3	3	3	3
Norway	1	3	1	1
Bulgaria	3	3	3	3
Czech Republic	1	1	1	1
Estonia	3	3	2	3

European Trend Chart on Innovation



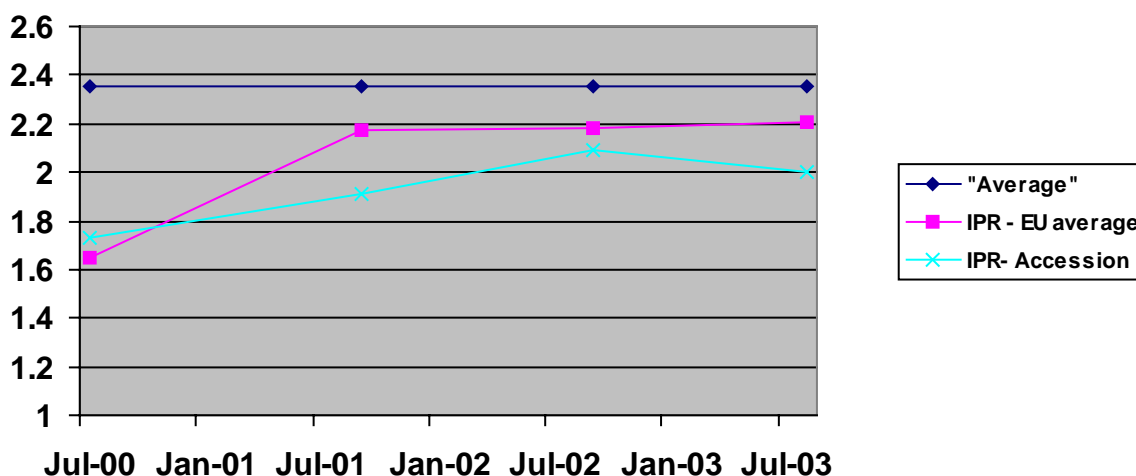
Hungary	0	0	0	0
Lithuania	1	3	3	3
Latvia	1	3	4	2
Poland	3	3	4	2
Romania	3	2	2	2
Slovakia	1	1	1	1
Slovenia	3	3	3	3

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).

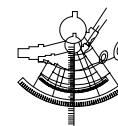
The results, shown in Figure 5, clearly indicate that in all groups of countries the issue of IPR-related innovation policy has become much more important over the last four years, particularly between 2000 and 2001, and is still increasing in relative importance. This underlines the general observation 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 nevertheless been recognised. Similarly, IP-related innovation policy is increasing in importance, and has been approaching the EU level in the Accession States, although the most recent data indicate a slight decline in relative importance of this Action Line. This may be due to the relative increase in importance of other areas of innovation policy, rather than a turn away from this policy area.

Figure 5: Perceived differences in priority of IPR-related innovation policies

Priority points: (2.35 points represent the Average priority line of all priority actions; scores above or below this line represents respectively an above or below average priority)



Source: European Trend Chart Country Reports (September 2003)



4. General Trends

A review of the qualitative information provided in the Trend Chart Country Reports for September 2003 (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.

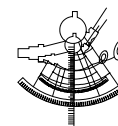
4.1 Increasing role of IPR in the innovation process

The general shift towards the concept of the 'Knowledge-based economy' has forced recognition of the use of knowledge as a commodity and 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 – as ownership of inventions rests with the Republic, and, due to inactivity on the part of the latter, ownership reverts to the researcher thus there is little opportunity for universities to generate funds from entrepreneurial activity. As a result, it has recently (February 2003) reviewed the strategic considerations of IPR within national technology policy and the Council for Research and Technology has issued some broad recommendations on 'Marketing of Research and Development: Intellectual Property Rights and Patents', which concentrate on how to encourage universities and public research institutes to participate in their researchers' inventions. More concrete support measures are likely to follow this general policy of encouragement.

In Denmark, an inter-ministerial working group has been established under the Ministry of Economic and Business Affairs and tasked with the scrutiny of the entire national IP system. A priority is for suggestions on how to adjust the current system within a relatively short time frame. Likewise, in Ireland a number of policy advisory bodies and state agencies have undertaken studies into the issue of IP. One of these, the Irish Council for Science, Technology and Innovation (ICSTI) has produced a statement on using intellectual property for competitive advantage. It noted that there was an absence of systems in place in Ireland to support the identification and exploitation of the country's intellectual property and recommended that Ireland should have an agreed National Code of Practice for the management of intellectual property from publicly funded research carried out in universities, institutes of technology and public research institutions. Such a code should be clear, transparent and equitable and should facilitate the application of intellectual property in the wider economy. The Council is to take action to progress the development and implementation of the National Code, which it believes will obviate the need for the introduction of legislation to govern the management of intellectual property from publicly-funded research.

Similarly, the French government has announced an action plan for intellectual property (in November 2002). Responsibility for the plan rests with the Ministry of Industry although it will be carried out in collaboration with the INPI and the ANVAR. The plan has the following objectives:

- Better training the users of intellectual property;
- Reinforcing the use of intellectual property;
- Increasing the efficiency of the French legal system;
- Modernising the profession of the intellectual property council;
- Ameliorate the quality of the services provided by the INPI;



- Developing the role of dialogue authorities;
- Communicating on intellectual property; and
- Maintaining and reinforcing the European and International presence of France.

The Dutch government has also identified patenting as a major policy issue within recent policy statements (for example, the budget of the Ministry of Economic Affairs - EZ⁹). 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. Follow up actions to the EZ's 2001 strategic policy investigation into the role of intellectual property in the Dutch knowledge-based economy have included more targeted studies into ways of overcoming specific problems in the IP system. The formulation of a policy on the modernisation of the IP system has, however, been subject to various delays, including changes in the government.

In common with several other countries, the issue of patent ownership in higher education institutions forms a topic of policy discussion in Sweden. The Swedish research agency VINNOVA, under a special mandate from the government, has drawn up proposals for better conditions for exploitation of research results (published in spring 2003). The report suggested that there should be no change in the right of university researchers to keep the ownership of patents, and that a programme should be implemented to increase the ability of Universities and University Colleges to support researchers in the process of commercialisation. VINNOVA also suggested better opportunities for researchers to move between the industrial and the academic spheres.

In 2001, the UK 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, trade marks and designs. The committee also gives independent advice on identifying and responding to emerging and strategic issues. The Patent Office has also continued to focus on the following priorities as defined by the DTI's 2001 Science and Innovation Strategy:

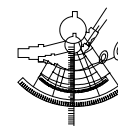
- Review of existing consultation processes and investigation of new ways to reach the widest possible range of interest;
- Introduction of an affordable Community Patent;
- Ratification of an international treaty to harmonise and deregulate the formal requirements for the acquisition and enforcement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

In May 2003, the Patent Office released the results of a public consultation on grace periods, concluding that there appears to be support for a limited grace period, albeit with a lot of burden on the applicant to prove that they are entitled to it. The Patent Office has also launched (in November 2002) a consultation on proposed changes to its 25-year old patent laws (see Section 4.4). It has also issued a Practice Notice clarifying the UK's positive position on inventions involving human embryonic stem cells.

In the above countries and in others too, the 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 following sections.

Amongst the accession countries, many have noted the contribution of membership to international bodies and agreements, such as the World Intellectual Property Office, the European Patent Convention or collaboration with programmes of the European Patent Office. These activities are also

⁹ 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



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, 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, which 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. However, to a large extent, the main concern underlying this apparent trend in the increasing relative priority of IPR issues is a widespread focus on copyright and patent infringement (software piracy, in particular). Thus, to some extent, a proportion of the reported IPR-related policy activity actually concerns greater efforts to reinforce IP-regimes. Nonetheless, governmental recognition of IP in the innovation process is also growing.

4.2 Increasing the awareness of IPR in innovation

A direct consequence of the high-level recognition of the importance of IPR to the efficient functioning of systems of innovation are 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 – companies, research institutes, public research organisations and universities.

In general, such awareness programmes have two main objectives:

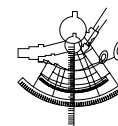
- To promote IPR as an essential tool in the management of innovation
- To educate on how to use IPR most effectively to protect IP

There is a perceived need to make researchers, both within industry (and particularly SMEs) and in public research bodies, more aware of the importance of IPR. These campaigns frequently involve a more pro-active stance on the part of national patent offices. Examples of such campaigns may be found in the Austrian Innovation Agency's activities at universities and public research institutes. These comprise regular road shows and workshops on IPR and the establishment of so-called 'Inventors' Consultants' within the universities. In Cyprus, awareness raising on IPR issues among SMEs and/or research organisations is achieved by the activities undertaken by the *Department of the Registrar of Companies and Official Receiver*. These include lectures to owners of small enterprises, lectures to college students on Copyrights, and Patents, workshops for owners of small enterprises on IP matters, and on the process of filing for a patent, and IP Seminars to entrepreneurs, lawyers, doctors, and other interested parties.

The French Action Plan for Industrial Property (see Section 4.1) aims to create an 'industrial property culture' with the objective of raising awareness, by 2005, of 50% of the students of some 300 engineering schools and 150 management schools. At a less targeted level, the French Government launched a new internet portal in June 2003. Named *Plutarque*, the portal has the aim of facilitating general public access to IP-related information on-line. Similar Internet-based services have already been reported in a number of other countries, such as Germany (AKPat), the UK's IP Portal and Luxembourg, the latter case concerning the proposed development of a system for the on-line registration of patents.

Portugal has witnessed the creation of the GAPIs network (PT 26), an action carried out in the context of POE partnerships and public initiatives measure. GAPIs – Industrial Property Support Offices – are light structures intended to provide professional advice on the use of industrial property rights as well as to raise the awareness about the competitive advantages associated with industrial property. The success of this action has already led to the extension and strengthening of the network and a new initiative will be launched with this aim.

At the European level, Luxembourg, Greece, Ireland, Italy and Spain are involved in a project known as 'Linking Innovation and Intellectual Property' (LIIP). This is co-financed under the Fifth Framework Programme for Research and Development (FP5), and seeks to highlight the importance of



intellectual property among innovative companies. In addition to developing various communication aids, e.g. a CD-ROM, good practice guides, case studies, etc., LIIP aims to implement a network of national assistance platforms that companies can contact with questions on intellectual property rights. The LIIP project brings together five national patent offices, as well as other experts.

In addition to these general awareness 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). However, 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', 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 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.

Few developments in this area have been reported from the accession countries apart from Estonia, where the promotion and awareness raising of IPR issues is conducted through the SPINNO programme (ES 17) which targets universities and spin-offs, and in Hungary, where the Ministry of Education's Department of R&D Strategy National Contact Point provides an IPR Helpdesk to assist SMEs in gaining information on Hungarian and international patent rights.

4.3 Developing/strengthening IPR infrastructure

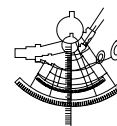
The development and reinforcement of the existing infrastructure for IPR forms a logical complementary area of innovation support policy, following on from campaigns to heighten awareness. There is a clear continuing trend in these types of measure apparent in the country reports. However, whilst the promulgation of general statements on the importance of IPR and information dissemination campaigns offer a comparatively low cost option to innovation support, amendments to the IPR infrastructure entail greater levels of resource investment.

Three broad categories of initiative may be discerned under this heading: Patent Authorities' activities; 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 towards it taking a more proactive stance. Its improved performance has already been accorded presidential recognition. Other Portuguese measures are detailed above and 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. However, in the face of a growing backlog of applications, the latest estimates from the Norwegian Patent Office do not foresee any improvements until 2004 at the earliest.

In a number of countries, changes in legislation (detailed below) will also affect the ways in which patent authorities operate. For example, Spain has instigated a reform of the Industrial Design Protection System, which has established an easier and more flexible system. Changes in the application process to protect industrial design will speed steps to get this protection and simplify payment of fees. The new Spanish Act also creates a 'grace period' giving applicants 12 months to apply for the protection from the time that the design was made public. There is also a significant time reduction for the final registration of the designs. The progressive reduction of fees is another improvement of the new legislation. The importance of this measure rests on the fact that the competitiveness of several industrial sectors is based in industrial design, and hence the measure



should prove useful in improving entrepreneurial competitiveness. Finally the Spanish Office of Patents and Trademarks (OEPM) has just implemented a programme to speed the procedure of obtaining patents. This new procedure will give response to situations in which it is necessary to obtain a patent urgently (i.e. negotiation of licenses, technology transfer offers, etc.).

It is also worth noting that, although similar activity is low in the accession countries, the Hungarian Patent Office has been accorded clearer and enlarged responsibilities in preparation for European integration.

4.3.2 Interface structures

Below the level of the national patent authority (Patent Office, National Institute, etc.) a number of countries have in place structures that act as intermediaries for the provision of a range of patenting services. Some examples are given below, although no new specific measures have been reported during the period October 2002 - September 2003.

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. 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 in Germany (DE 07), which offer SMEs access to scientific and technological information, has been established. A range of support is on offer, including access to original patent documents, support for information searches, free consultations with patent agents, etc. The Industrial Property Support Offices (GAPI) Network (PT 26) in Portugal is also relevant in this context (see above). The establishment and extension of this system forms part of a wider initiative on the 'Valorisation and Promotion of the Industrial Property System'.

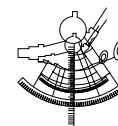
Germany is particularly well advanced in this area. The relatively recent 'Commercialisation Initiative' (DE 72) is aimed at assisting Higher Education Institutions and other public research organisations to improve the commercialisation of IP. Specifically, the Initiative aims at: creating professional 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', and the UK's IP Portal, 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), whilst 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.

Also as mentioned above, 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 aiming at the improvement of 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 publicly 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 4.2).

4.4 Reform of legislation concerning IPR

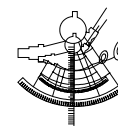
A number of governments have recently amended or introduced legislation dealing with intellectual property issues. Partly, these changes have come about through the new demands imposed by the knowledge economy (as discussed above) and partly through a need to harmonise legislative frameworks. There are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

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

As a result, in recent years several Member States have introduced laws and acts to better position themselves and their national innovation systems in respect of the changing international IP systems. Examples include Greece (Law 2919/01 article 11), Ireland (Electronic Commerce Act 2000, the Copyright and Related Rights Act 2000 and the Communications Regulation Act 2002), Germany (*Arbeitnehmererfindungsgesetz*, No. 42) and Denmark (law on patents) whilst the 'One Hundred Days Programme' in Italy foresees a number of important changes in the general framework concerning patents for commercial inventions. A similar modification in Spanish law allows researchers from public research organisations to obtain profits from the commercial exploitation of, or cession of IPR from, their inventions.

At a general level, a number of countries have expressed unilateral or multilateral support for the need for a Community Patent and have commenced procedures for dealing with its prospective introduction. Thus, in Cyprus, the copyright law was amended in July 2002. This legislation plays a crucial role in the alignment process as it aims at implementing the directives on software protection, rental and lending rights, and the term of protection and database protection, including the *sui generis* right. The amendment of the Cyprus Patent Law [CY 4], enacted in July 2002, aims at aligning with the directive on the legal protection of biotechnological inventions. Other acts include the Legal Protection of Industrial Designs and Models Law and the Legal Protection of Topographies of Semiconductor Products Law which came into force in February 2002.

As noted above, the advent of the Community Patent is forming a significant driver for change in patent legislation. For example, Finland has reached agreement concerning the Community Patent applicable to all Member States (March 2003), and the date for enforcement of the system was confirmed. The Community Design system will offer protection for industrial design (the outward appearance of the product), while national legislation on design rights was also amended in this respect. Discussion of measures to improve the legislative environment of commercial utilisation of university research has also continued (see Section 4.6). Similarly, the Icelandic Government has decided that the country will accede to the European Patent Convention, with accession expected to take place in 2004. The Icelandic Parliament has agreed a resolution to confirm the EEA Joint Committee decision to make the European Parliament Council's directive no 98/44/EC part of the EEA agreement. Changes to the Icelandic Patent Act will be required in order to fulfil these obligations. In the UK, the Patent Office has set out proposals for changes to the 25-year old patent laws. These represent the most significant updating of UK patents legislation since the introduction of the Patents Act in 1977 and form an essential step in deciding what measures will be included in new legislation. Such changes are necessary for the UK to deliver on its commitment to implement recent changes to the European Patent Convention, with which UK patent law is aligned (the UK is the third largest European user of the system). The proposed changes will, for example, encourage investigation of new medicinal uses for known pharmaceuticals, and make it easier for businesses to maintain and protect their patents once granted. Administrative procedures should also be simplified.



In a proposal to Parliament the new Norwegian government argued that universities and colleges should be more involved in the commercialisation of R&D results, especially in the form of patents, so that society gets more out of its investments. As a consequence, the law is to be changed so that universities and colleges may claim the right to exploit commercially inventions made by teachers and researchers. To secure the researchers' right to diffuse their knowledge, teachers and scientific personnel employed by these institutions will have the right to publish their findings, even if this may stop the institution from commercialising the invention. The Norwegian parliament accepted the government proposal and the amendment took effect on January 1st 2003. Similarly, in Belgium, the Walloon government has agreed to transfer IPR rights, arising from R&D projects which it part financed, to Walloon Universities and institutes of higher education and to reimburse related patent application costs of the universities (BE 45).

A new Industrial Property Code (Decree-Law no. 36/2003, of March 5) has been published in Portugal. The new code is seen as an instrument for promoting innovation. The main changes introduced by the new code include the acceptance of foreign language words as trademarks, the introduction of the concept of prior registration of industrial designs and models, the possibility of option of prior exam for utility models, the parallel between utility models subject to previous exam and patents, and the adoption of EU regulations, namely in what regards biotechnology inventions.

The legislative aspects of the reform of the Spanish Industrial Design Protection System have already been described in Section 4.3 above.

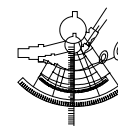
As has already been noted, many of the accession countries have become members of international bodies whose remit deals specifically or in part with IP issues. Some of these bodies, such as the World Trade Organisation, have requested members to put into place more effective IP protection frameworks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

Estonia has also undertaken a number of surveys into IPR-related issues during 2002 and these have been used to develop measures for IPR protection by the Ministry of Economic Affairs and Communication throughout 2003.

4.5 Introduction of specific public measures

As mentioned earlier, there is a clear and strong trend to recognising that a successful and competitive economy needs a good IPR system. It is recognised that the main drivers for 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 a 'national system of innovation'. This covers many different subjects but include 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 provides a reasonably predictable and stable background that gives incentives creatively. 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 can 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.

The Austrian TecMa initiative (AT 16) operated by the Innovation Agency represents one such concrete measure to support IPR. Its broad goal is to support scientists applying for a patent and promote the exploitation of their inventions.



In Belgium, the three regional governments and their agencies are responsible for encouraging the commercial exploitation of IPR and a number of measures have been put in place since 1999. For example, the Flemish government funds interface structures at the universities (BE 18) with the aim of ensuring, amongst other activities, the commercialisation of research results and IPR protection in universities. The funding framework for these interfaces was reviewed during 2002 in order to provide them with a five-year funding envelope based on an action plan. A similar measure exists in Wallonia where the government provides funding to reinforce university interfaces with specialised personnel able to advise enterprises on IPR issues (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, using patent databases (see BE 58, BE 40, BE 48) or to acquire IP rights, BE 10, BE 68, 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 (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. Technology watch and patent search services are provided by a number of organisations and also by the technological attachés of the collective research centres.

In Germany, an accompanying measure, the Commercialisation Initiative (DE 72) has been introduced to assist HEIs and other public research organisation to improve IP commercialisation in their institution. Although not a new measure, it is still in the process of development. It consists of two parts. The line 'promotion of commercialisation' aims to: (i) create a professional patenting and commercialisation infrastructure in public research; (ii) promote the use of patents for protecting research results at public science institutions; (iii) increase further education in the field of IPRs; and (iv) build up a network of commercialisation units at public science. It provides financial support for building up an effective patent commercialisation infrastructure – so-called patent commercialisation agencies (PVAs) by making use of existing patent consultants, patent agents and service providers, including financial sources for defending IPRs. The second line 'innovation through patenting and commercialisation' supports information events intended to disseminate knowledge relevant to patents also receive funding. A number of other, often well established, promotion programmes also aim to strengthen the use of IPRs by enterprises, HEIs and PSREs (see Annex1, entry for Germany, for details).

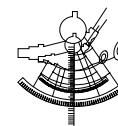
In Israel, the TNUFA – Start-up Promotion Programme is designed to give momentum to promising entrepreneurs determined to develop start-up companies. The assistance portfolio provided by TNUFA includes Patent Search and funding for patent filing. Likewise, R&D projects supported by OCS through the Law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

The exploitation and commercialisation of technological innovations is a priority area in Spain's IV R&D Innovation National Plan. Thus financial support is available to stimulate patent application processes when the invention has been generated in an innovation project supported by the PROFIT Programme (ES 17) or national R&D programmes (ES 13).

Also relevant under this topic, although not a new measure, is the UK's Fund for the Commercialisation of IP in Public Sector Research Establishments (UK 52).

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, etc. An example is provided by Luxembourg where, in an effort to encourage companies (especially SMEs) to register patents, the Ministry of Economy (Intellectual Property Rights section) has established two relatively new measures: The 'short-term patent' and on-line registration of patents and copyrights.

The training of researchers in universities and spin-offs in IPR issues under the Estonian SPINNO measure has already been mentioned in Section 4.2.



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 in this area. A clear and accessible IPR framework is necessary to ensure that the rights of researchers and institutions are protected and that all benefit from the revenues generated, and also to build confidence amongst those involved in research collaborations involving the public and private sectors.

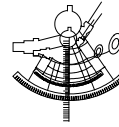
Several of the measures mentioned above are applicable to this category, for example the granting of IPR rights to Walloon universities, together with the reimbursement of patent application costs offered under BE 45. Likewise, the provision of interface structures at Flemish universities (BE 18) and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

At a broader policy level, the Flemish government has commissioned two studies concerning IPR. The first *'The protection and valorisation of intellectual property rights in cooperation projects between universities, polytechnics, research institutes and firms'*, examines the conditions for successful cooperation and analyses how the utilisation of research results can be optimised. It describes the situation in Flanders, compares it to the situation abroad and makes recommendations. The second study, *'A Longitudinal Study into the Science-Technology-Market Interactions'*, examines the relation between scientific research, technological applications and their commercial exploitation through an analysis of the scientific and technological performance and the sector output data. This report also verifies if the technological exploitation influences the scientific orientation of research and provides extensive analysis of IPR related issues.

Similar studies have been carried out in other countries. For example, in Finland the University Inventions Working Committee – set up jointly by the Ministry of Trade and Industry and the Ministry of Education to consider the commercialisation of research results – found it important to improve the conditions for innovation in universities and polytechnics, and also to provide effective support services. According to the committee, the current statutes do not provide a sufficient basis for enhancing the utilisation of university invention, and commercialisation of inventions requires clear definition of the rights to inventions in legislation. The committee recommended amendments to the Act governing in-company inventions and the Universities and Polytechnic Act and the enactment of totally new legislation. The reform would mean that the researcher and teacher exception rule should be revised – i.e. university researchers would be in the same position as any employee. However, the new act would not cover the intellectual property right in free academic research, where the inventor has the right to privacy of publishing and utilisation of his/her invention. The act would be also contractual; the regulations would be applied if not contracted otherwise. 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 IPR practice in Finland closer to the prevailing practice in other Member States of the European Union, the US and Japan. The Ministry of Trade and Industry launched a legislative reform encompassing this issue in autumn 2002, and it is expected to be submitted to the government in late 2003.

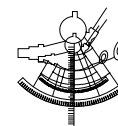
In the UK, meanwhile, the government's ongoing Lambert Review of higher education and research has been examining submissions from a number of highly influential organisations. The review, which has received a large number of submissions from over 300 higher education institutions, professional bodies and businesses, is currently in its consultation and analysis phase with the delivery of its final report due for the end of October 2003. However, Lambert has released a number of preliminary findings and early indications are that the final outcomes are likely to be less radical than some had expected. Apparently, the review has identified the ownership and trading of IPR as a major area of disagreement between industry and academe. Possible solutions to the problem are thought likely to lie in simplifying the arrangements by which IP can be allocated.

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 (see Section 4.4). As a consequence, IPRs on inventions belong to the university whilst inventors receive a share of the royalties arising from the commercialisation. Similar developments have also taken place in Denmark and several other countries as detailed in the above Sections.

Examples of measures in this area in the accession countries are rare but note is made of the Estonian SPINNO programme (ES 17) (already mentioned in Section 4.2), and the recent debate on protection of intellectual property and patenting in Slovenian public research institutes and universities. In the latter case, no uniform solution has been developed thus each institution sets its own rules as to the distribution of income derived from the intellectual rights. However, with the promotion of university spin-offs (the Incubators Scheme, SO 13) it is anticipated that this issue will require a more systematic solution.



5. Policy Issues

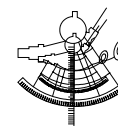
It is clear that over recent years that policy makers have increasingly recognising the role that IPR has to play across a range of areas and its emergence as an essential feature of a successful, innovative economy. Many of these issues are tackled by the national IPR-related measures and initiatives 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, in particular 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, reliant upon firms taking advantage of their physical and intellectual assets. While there are well-developed accountancy methods and procedures for the identification and valuation of companies' physical assets, there are no (widely accepted) methods for identifying and evaluating intellectual assets.
- Identification of best practice in intellectual property management.
- The role of IPR in promoting the exploitation of the results of publicly-funded research and development and the need for clearly defined management structures and procedures.

At the global level, an IPR issue currently dominating discussions, particularly between the developed and developing countries, is that of patents and access to medicines. Developing countries, facing difficult social and economic circumstances, view that current IPR frameworks give unfair advantage to developed countries. They argue that it is difficult to establish a level competitive field when the current IPR system helps large multinationals retain a competitive advantage by creating barriers to entry. Developing countries therefore demand 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, perform 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 ease of imitation and copying of 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. These issues are particularly pertinent in the context of EU enlargement and it is interesting to note that several accession countries have recognised the need for stricter enforcement on IP-related issues and are introducing more stringent enforcement regimes in order to protect their national IP assets.



Annex 1: Extracts from Country Reports concerning on IPR policy developments

AUSTRIA

In an international comparison, Austria has a poor performance concerning numbers of patent applications, especially patent applications by public research institutions. Up to now, IPRs belonged to the employer (in the case of universities, this was the Republic of Austria). The new law on University Organisation (UG 2002) includes, for the first time, regulations how the institution itself can participate in inventions of its researchers. Therefore, the discussion now concentrates on more basic questions like an information campaign for universities or the establishment of new consultative and marketing agencies.

Actions are currently taken on the one hand concerning strategic considerations on Austrian technology policy: the recommendation adopted by the Council for Research and Technology on 14 February 2003 on 'Marketing of Research & Development: Intellectual Property Rights and Patents' concentrates on the question of how to encourage universities and public research institutes to use their new right to participate in inventions made by their researchers. The council recommends the following initiatives:

- stimulation & motivation: researchers should be stimulated by a set of financial and non-financial measures (e.g. release from daily work and extra time for the work on inventions, bonus-system for inventions, advantages for the professional advancement of a researcher etc.);
- building-up of know-how: implementation of transfer-centres at universities with the tasks of consulting researchers in all questions concerning patenting and IPR and organizing training of researchers and information campaigns to raise the awareness for IPR;
- marketing-agencies – closely cooperating with or even integrated in the transfer-centres – should serve as links between universities and the private sector and support researchers in finding commercial partners.

To implement this infrastructure, the council has demanded a kick-off budget to be provided by the Ministry for Economic Affairs and Labour.

The Innovation Agency (AT 45) runs the following activities at universities and public research institutes:

- regular road shows and workshops on IPR;
- establishment of so called 'Inventors' Consultants' directly at the universities.

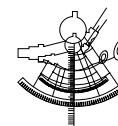
A concrete measure with regard to IPR is the TecMa initiative (AT 16) carried out by the Innovation Agency. Its goal is to support scientists applying for a patent and to promote the exploitation of their inventions.

The present situation concerning IPRs is still seen as not being satisfactory. Nevertheless, there have been some remarkable legal improvements which have to be followed by concrete results in terms of support initiatives for universities and research institutions, and finally in terms of increasing numbers of patent applications.

BELGIUM

Intellectual property rights in terms of the registration and protection of patents remains a Federal competence in Belgium (see BE 05) while the tax laws provide for tax reductions for patents acquisition (see BE 03). A year 2000 Federal Government policy note¹⁰ outlined a series of proposals to improve the protection and exploitation of IPR in Belgium. However, little or no progress was made

¹⁰ These included: the reduction of the legal insecurity by the application of a 'grace period' allowing the author of a publication to request a patent; changes to the law of 1984 concerning the patents on inventions by employees allowing a legal entity to request a patent on behalf of an employee; measures to reduce the cost of patenting (research tax reduction, etc.); on-line filing of patents; etc. See the November 2000 Trend Chart Belgian Country Report for a summary of this policy note.



and it remains to be seen whether the new Federal Government (elected in May 2003) will make IPR a priority (no mention is made of IPR in its policy agreement).

An action worth highlighting is the commissioning by the Flemish government of two studies concerning IPR. The first concerns *'The protection and valorisation of intellectual property rights in cooperation projects between universities, polytechnics, research institutes and firms'*. The cooperation between knowledge centres and companies being one of the pillars of the new economy, the study examines the conditions for a successful cooperation and analyses how the utilisation of research results can be optimised. It describes the situation in Flanders, compares it to the situation abroad and makes recommendations¹¹. The second study entitled *'A Longitudinal Study into the Science-Technology-Market Interactions'* examines the relation between scientific research, technological applications and their commercial exploitation through an analysis of the scientific and technological performance and the sector output data. The report verifies also if the technological exploitation influences the scientific orientation of research and provides extensive analysis of IPR related issues.¹²

The three regional governments and their agencies are responsible for encouraging the commercial exploitation of IPR and a number of measures have been taken since 1999. The **Flemish** government funds interface structures at the universities (BE 18) with the aim of ensuring, amongst other activities, the commercialisation of research results and IPR protection in universities. The funding framework for these interfaces was reviewed during 2002 in order to provide them with a five-year funding envelope based on an action plan.

A similar measure exists in **Wallonia** where the government provides funding to reinforce university interfaces with specialised personnel able to advise enterprises on IPR issues (BE 47). The government also agreed to transfer IPR rights, arising from R&D projects which it part financed, to Walloon Universities and institutes of higher education and to reimburse related patent application costs of the universities (BE 45).

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, using patent databases (see BE 58, BE 40, BE 48) or to acquire IP rights, BE 10, BE 68, 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. 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

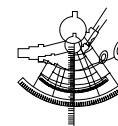
In Cyprus, the IPR Management Centre, a special unit of the Department of Registrar of Companies (supervised by the Ministry of Commerce, Industry and Tourism), deals with IPR issues.

The House of Representatives enacted a bill amending the Cyprus copyright law in July 2002. The legislation plays a crucial role in the alignment process as it aims at implementing the directives on software protection, rental and lending rights, and the term of protection and database protection, including the *sui generis* right. The amendment of the Cyprus Patent Law [CY 4], enacted in July 2002, aims at aligning with the directive on the legal protection of biotechnological inventions. The Legal Protection of Industrial Designs and Models Law and the Legal Protection of Topographies of Semiconductor Products Law were enacted in January 2002 and came into force in February 2002.

Concerning the IPR of research results in the public sector, IPRs are shared on the basis of an agreement. By default, when there is no agreement between the researcher and the organisation, and the researcher is an employee, the IPRs belong to the organisation. In the framework of the Annual Programme of Financing of Research Projects [CY 3] and the PENEK [CY 20] of the RPF, the IPRs

¹¹ Report available in Dutch only at: <http://www.innovatie.vlaanderen.be/pbo/eindrapporten/PBO98-46 Eindrapport.pdf>

¹² Report available in English at: <http://www.innovatie.vlaanderen.be/pbo/eindrapporten/PBO99-109 Volledig eindrapport.Vlaams Project.pdf>.



are owned by the researchers, unless explicitly otherwise agreed. In the private sector, there are no specific rules and it is a matter of agreement (it depends on the institute).

Awareness raising among SMEs and/or research organisations for IPR issues is achieved by the activities undertaken by the Department of the Registrar of Companies and Official Receiver. These include lectures given to owners of small enterprises regarding the protection of their own intellectual property, lectures given to College Students on Copyrights, and Patents, a workshop organised for owners of small enterprises on intellectual property matters, and especially about the process of filing for a National, a European, or a PCT (world) patent and an Intellectual Property Seminar to entrepreneurs, lawyers, doctors, and other interested parties such as the Cyprus Institute of Technology, as well as representatives of the Neurology and Genetics Institute.

However, the government does not provide financial grants to assist companies to file for patents. There are no specific schemes to help researchers at the University of Cyprus (or any other research institution in the country) to valorise patented inventions in the private sector, although the incubator scheme [CY 5] covers patents registration.

DENMARK

No new specific measures have been introduced under this heading within the period under review. Nevertheless, IP policies are regarded as very important, and an inter-ministerial working group under the auspices of Ministry of Economic and Business Affairs has been assigned to scrutinise the entire IP system in Denmark. As a high priority task, the working group is to suggest adjustments to the system that can be implemented relatively quickly on a national basis.

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 promote the commercial use of inventions. An appropriation of DKK 58 million (approximately €7.8 million) covering the period 2000-2003 has been given to support implementation of the Act, while the establishment of new infrastructures at universities in support of the act is believed to have considerable strategic significance.

A project has also been launched to improve electronic access to patents databases for companies and researchers. The project comprises the setting up of the following:

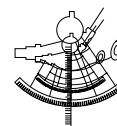
- a common entrance to Danish patents and utility models;
- electronic access via CD-ROM/DVD to the complete collection of patent information of the Danish Patent and Trademark Office; and
- an Internet-based database comprising all public available information from the Danish patent database.

The project will be completed in late 2003.

FINLAND

Agreement of the Community Patent applicable to all Member States was reached in March 2003, and the date for enforcement of the system was confirmed. The Community Design system will offer protection for industrial design (the outward appearance of the product). National legislation on design right was also amended in this respect.

The discussion of measures to improve the legislative environment of commercial utilisation of university research has continued. The University Inventions Working Committee set up jointly by the Ministry of Trade and Industry and the Ministry of Education to consider the commercialisation of research results found it important to improve the conditions for innovation in universities and polytechnics and also to provide effective support services. According to the committee, the current statutes do not provide a sufficient basis for enhancing the utilisation of university invention and commercialisation of inventions requires clear definition of the rights to inventions in legislation. The committee recommended amendment to the act governing in-company inventions and the Universities and Polytechnic Act, and the enactment of totally new legislation. The reform would mean



that the researcher and teacher exception rule should be revised – i.e. university researchers would be in the same position as any employee. However, the new act would not cover the intellectual property right in free academic research, where the inventor has the right to primacy of publishing and utilisation of his/her invention. The act would be also contractual; the regulations would be applied if not contracted otherwise. 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 IPR practice in Finland closer to the prevailing practice in other Member States of the European Union, the US and Japan. The Ministry of Trade and Industry launched a legislative reform encompassing this issues in autumn 2002, and it is expected to be submitted to the government in the late 2003.

FRANCE

The national operator on intellectual property issues is the National Institute for Intellectual Property (INPI) (see web site: <http://www.inpi.fr>). The 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 other activities, every two years the institute organises the INPI innovation awards ('INPI Trophies'), intended to promote SMEs, which have successfully used patents for business development. The trophies follow two different phases: first in the regions and later at the national level. The regional trophies have the objective of awarding the enterprises and research organisations that carry out a good intellectual property policy. The winning parties from the regions compete in the national trophies. The last edition of the national trophies took place on 28 November 2002. In 2002, the national council of RTDs (Technological Development Network) decided to carry out a campaign, together with the INPI, to raise intellectual property awareness.

The French government announced an action plan for industrial property in November 2002. The plan was announced by the Ministry of Industry and will be carried out in collaboration with the INPI and the ANVAR. The plan has the following objectives:

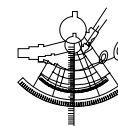
- Better training for the users of industrial property;
- Reinforcing the use of industrial property;
- Increasing the efficiency of the French legal system;
- Modernising the profession of the industrial property council;
- Ameliorate the quality of services provided by the INPI;
- Developing the role of dialogue authorities;
- Communicating on industrial property;
- Maintaining and reinforcing the European and International presence of France.

Besides, the plan foresees the establishment of a real 'industrial property culture'. The objective is to raise awareness, by 2005, of 50% of students of some 300 engineering schools and 150 management schools. At the same time, the government has the following objectives:

- Reinforcing the French legal system;
- Making courts professional;
- Hardening sanctions for counterfeiters;
- Reviewing the composition of the INPI administrative council to open it to SMEs;
- Improving the intellectual property code;
- Developing the electronic deposit of patents;¹³
- Reinforcing INPI's presence at the local level, through the creation of new regional delegations.¹⁴

¹³ This service was launched on the 15 January 2003, see <http://www.inpi.fr/inpi/html/presse/index.htm>

¹⁴ See <http://www.anvar.fr/actulettN16arti2.htm>



Although the Institute's budget decreased by 2% in 2001 (€124 million), INPI continues to be an active actor of the intellectual protection and industrial property in the country:

- Launching of Plutarque: an Internet portal with the objective of facilitating the access of the large public to information related to intellectual property. The new tool was presented in the on-line showroom on December 2001 and launched on 17 June 2003.
- Finding a new concessionaire for the diffusion of information on industrial property: beginning on March 2002 a new concession gave the way to a new service on professional information.
- Presentation of the book called: 'Patents and Trade Marks: a history of intellectual property', in the framework of the celebration of its 50th anniversary. The book studies the fundamentals of the industrial property and the origin of current legislations

GERMANY

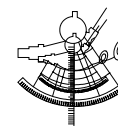
Fostering the use of intellectual property rights (IPRs) is addressed in German innovation policy both in the field of legislation (IP regulation) and via promotion programmes. The main current activities concern the implementation of legal and organisational changes in the use of IPRs at HEIs in 2002.

In February 2002, the exclusive right of HEI research personnel (professors) to own the intellectual property of any inventions arising out of research activities at the HEI was abolished by a change in the relevant law ('*Arbeitnehmererfindungsgesetz*', § 42; see DE 59). This so-called '*Hochschullehrerprivileg*' was seen as an obstacle to commercialisation because of inadequate information, experience and money necessary to commercialise patents successfully. Therefore, despite a significant increase in the number of patents applied by university professors, commercial results are assumed to be of little importance. Under the new regulation, IPRs on inventions will belong to the university, while the inventors will receive a share of the royalties from their commercialisation.

As an accompanying measure, a programme was introduced to assist HEIs and other public research organisation to improve IP commercialisation in their institution. This commercialisation initiative (DE 72) consists of two parts. The line 'promotion of commercialisation' aims to (i) create a professional patenting and commercialisation infrastructure in public research, (ii) promote the use of patents for protecting research results at public science institutions, (iii) increase further education in the field of IPRs, and (iv) build up a network of commercialisation units for public science. It provides financial support for building up an effective patent commercialisation infrastructure – so-called patent commercialisation agencies (PVAs) by making use of existing patent consultants, patent agents and service providers, including financial sources for defending IPRs. Until the end of 2002, a total of 20 PVAs had been established. The second line 'innovation through patenting and commercialisation' supports information events intended to disseminate knowledge relevant to patents also receive funding.

A number of other – often well established – promotion programmes also aim to strengthen the use of IPRs by enterprises, HEIs and PSREs:

- 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 them 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 in case of revenues. The office is entitled to receive a quarter of the revenues.
- 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. The patent information 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, several sub-programmes attempt to increase the use of IPRs in SMEs (DE 24):
 - 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, and patent searches. They also cover consulting services in the fields of IP, exploiting new business fields, commercialisation strategies, and market monitoring.
 - The INSTI SME patent initiative aims to activate those SMEs which so far have not submitted any patent applications but for which the patent system is of value. It offers funding to facilitate a grasp of the patent system and to ease searches and information to demonstrate to SMEs the operational value of patent applications and the patent system.
 - There are also two INSTI measures that promote the use of IPRs at HEIs (DE 48):
 - AKPat provides an Internet-based platform for higher education institutions and researchers, giving an overview of patenting-related competence at higher education institutions, including supportive infrastructure. In particular, AKPat is trying to bring together the divergent intermediary commercialisation infrastructure at higher education institutions.
 - InWert provides financial support to higher education institutions for introducing new courses on the commercialisation of inventions (including IPRs). It aims at strengthening the integration of commercialisation related know-how 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.

GREECE

There is no strong tradition on patenting and intellectual protection in Greece. This is linked both to the traditional structure of the productive sector and to a low propensity to patent in general. An effort to improve this situation by the incorporation of support indirectly in measures actually aiming at other areas has become apparent in the last few years, like the slight reinforcement of the HEI Liaison Offices [GR 53] and the eligibility of patenting costs in the spin off support measure PRAXE [GR 39].

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

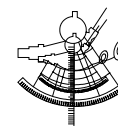
ICELAND

No new specific measures have been introduced under this heading within the period under review. However, the government has decided that Iceland will accede to the European Patent Convention, expecting accession to take place in 2004. Also, a resolution has been agreed by the Icelandic Parliament to confirm the EEA Joint Committee decision to make the European Parliament Council's directive no 98/44/EC part of the EEA agreement. To fulfil these obligations some changes to the Icelandic Patent Act will have to be made.

IRELAND

The government has enacted a number of critical acts to underpin the development of a knowledge-based economy including the Copyright and Related Rights Act 2000 (IE 06), Electronic Commerce Act 2000 and the Communications Regulation Act 2002.

A major report on eBusiness published by Forfás recommended that Ireland should provide an overarching legislative and regulatory framework for eBusiness and, in the context of the development of the knowledge economy, should ensure appropriate protection for on-line intellectual property. The Forfás eBusiness 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 concern that Ireland would not be able to fully maximise the large-scale increase in public research investment has resulted in policy advisory boards and state agencies carrying out research into issues such as intellectual property rights and other aspects of the national system of innovation. The Irish Council for Science, Technology and Innovation (ICSTI) in a statement on using intellectual property for competitive advantage noted that there was an absence of systems in place in Ireland to support the identification and exploitation of the country's intellectual property. It recommended that Ireland should have an agreed National Code of Practice for the management of intellectual property from publicly-funded research carried out in universities, institutes of technology and public research institutions. It recommended that the code should be clear, transparent and equitable and should facilitate the application of intellectual property in the wider economy. The council said that it would take immediate action to progress the development and implementation of the National Code of Action. The council had been concerned that Ireland lacked the necessary systems to support the identification and exploitation of Ireland's intellectual property. The council believed that such systems were necessary if Ireland was to maximise its very significant increase in publicly-funded research. ICSTI advocated that the National Code of Practice should be clear, transparent, consistent and equitable and should facilitate the application of this intellectual property in the wider economy. The council believed that the introduction of the National Code of Practice would obviate the need for the introduction of legislation to govern the management of intellectual property from publicly-funded research. Given the urgency of the need to introduce systems for the management of intellectual property the council also committed itself to reviewing the situation within six months.

ISRAEL

According to the revised Law for the Encouragement of Industrial R&D (IL 4), awaiting approval by the parliament, companies will be allowed, subject to certain conditions, to transfer abroad know-how acquired through government funding, after reimbursing the government on the basis of the know-how value at time of sell or on its contribution to the company price in case of company sell-out.

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

Also relevant is the TNUFA – Start-up Promotion Programme. This 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. In addition, R&D projects supported by OCS through the Law for encouragement of R&D are entitled for funding of patenting expenses.

Recently, the government has been making strong efforts to enforce intellectual property rules, especially those pertaining to software and to music.

ITALY

New rules on the intellectual property were announced by the new government in its 'One Hundred Days Programme': the programme introduces some important changes in the general discipline concerning patents for industrial inventions. These changes aim at stimulating the research activity by providing the authors of such inventions, who act as employees of the Universities or the public administrations, with all the rights coming from the invention, including a quota of the proceeds coming from its industrial exploitation.

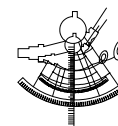
LIECHTENSTEIN

No new developments in this area have been reported.

LUXEMBOURG

To sensitise and encourage companies (especially SMEs) to register patents, the Ministry of Economy (Intellectual Property Rights section) has created the following two new measures.

- The 'short-term patent' (LU 11): The difference between this patent and the classic one lies in the duration of the protection and its cost. The depositor has the choice between a six-year patent, which does not necessitate a research report, and the 20-year 'classic' patent which requires



such a report. The difference in terms of duration is justified by the biggest legal safety which supplies the research report. The depositor who does not want to spend money for the research report will be allowed a six-year protection patent, whereas under the current regulation, no patent could be delivered.

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

A European project entitled Linking Innovation and Intellectual Property (LIIP): At European level, Luxembourg is involved in this project co-financed under the Fifth Framework Programme for Research and Development (FP5), which seeks to highlight the importance of intellectual property among innovative companies. In addition to developing various communication aids, e.g. CD-ROM, a good practice guide, case studies, etc., the LIIP aims to implement a network of national assistance platforms that companies can contact with questions on intellectual property rights. The LIIP project brings together five national patent offices (Greece, Ireland, Italy, Luxembourg and Spain), as well as other experts. Luxembourg is represented in the project by the Ministry of Economic Affairs, the Technology Watch Centre and Luxinnovation.

The bill 4673B modifying the patent law: this law is the transcription of the directive 98/44/EC on the juridical protection of biotechnological inventions. A debate took place in February 2002 on the deputies' chamber. The result was the vote of a motion inviting the government to ask a new negotiation of the 5.2 directive's article.

NETHERLANDS

Protection of intellectual property is recognised as an important policy area in The Netherlands and although no formal policy has yet been implemented, the period under review in this report was characterised by increased policy activity in this area. Furthermore, the area was identified as an priority area in the new EZ (Ministry of Economic Affairs) 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.¹⁵ According to the report, the Dutch economy is becoming increasingly knowledge-intensive. More than ever, future prosperity depends on the innovative capacity of Dutch business and industry. Therefore the issue of IP is high on the agenda of policymakers. The investigation gives the impetus for the direction in which the patent system ought to be developed (modernised) by exploring the question as to the 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 of conducting a research programme on 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.

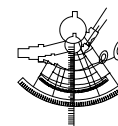
IP policy in universities

The development of an IP policy in universities in The Netherlands is proving to be a troublesome process. First, the Cabinet dismissed the advice from the Advisory Council on Science & Technology Policy (AWT), dated June 2001, concerning patenting by universities.¹⁶ In this advice the AWT announced that universities should not give much priority to building up and managing their own patent portfolio. This is better left to companies. Only in exceptional cases, patent application by the university itself would be appropriate, and then only for a limited period of time.¹⁷ The advice was

¹⁵ Ministry of Economic Affairs, Intellectual Property and Innovation: concerning the role of intellectual property in the Dutch knowledge-based economy, The Hague: March 2002

¹⁶ 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

¹⁷ *Onderzoek Nederland*, no. 59, June 2001



heavily criticised, in The Netherlands as well as abroad. Second, a meeting of the Platform Patent Policy in universities in the second half of September 2001 that was intended to formulate policy recommendations, was ill attended and ended without results. It was not until June 2002 that the platform came up with a concept version of policy recommendations. In addition to a number of recommendations pertaining to the conditional framework, the main recommendation states that:

1. Patenting of results from publicly-funded research seems only useful when business has expressed an interest in taking over the patent or applying for a license;
2. Making out a patent to a starter is an appealing 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.

However, the recommendations have met a lot of criticism from the universities. Moreover, the recommendations are free of obligation. Final recommendations will only be produced in October 2002. Yet it is not very likely that universities will reserve financial resources for IP policy given that they are faced with new cutbacks imposed by the new government.¹⁸ The cutbacks have tempered the universities' ability and inclination to take up the issue of knowledge protection.

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

NORWAY

In 2000, the Ministry of Trade and Industry reduced application fees for small firms in order to encourage them to patent. This measure entailed a 20% reduction in the application fee (to NOK 800) for enterprises of 20 employees or less, including independent applicants. In addition, this applicant group is now exempt from the examination fee (NOK 2000) that was recently implemented. The examination-fee will affect medium-sized companies, but will be refunded in all cases should the application be withdrawn.

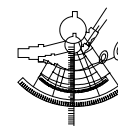
On 19 April 2002, the new government presented a proposal regarding changes in the law of intellectual property rights to parliament. The proposal was based on the Bernt Commission's green paper on commercialisation of results from university and college research (published in March 2001). Professor Jan Fridthjof Bernt of the University of Bergen led the commission. The commission felt that commercialisation should be considered an integrated part of the institutions' duty to disseminate knowledge. The majority of the commission believed that the researcher ought to retain the full property rights of an invention (as it is today). These members argued that this is necessary in order to defend the freedom of scientific research. A minority would like to transfer this right to the institution. They argued that the institution needs these rights in order to promote commercialisation in an efficient way. The whole commission held that the income following from such commercialisation should be split between the researcher, the institution and the research units. Commercialisation can be strengthened by the use of various incentives, practical organisational changes and information on the importance of such activities. The commission argued that the institutions should develop relevant strategies and establish 'innovation centres' with professional advisers, internally or externally. A summary of the report can be found in the Norwegian Trend Chart Report for June 2001.

In its proposal to parliament the new government argued that universities and colleges should be more involved in the commercialisation of R&D results, especially in the form of patents, so that society gets more out of its investments. The law is to be changed so that universities and colleges may claim the right to exploit commercially inventions made by teachers and researchers.

To secure the researchers' right to diffuse their knowledge, teachers and scientific personnel employed by these institutions will have the right to publish their findings, even if this may stop the institution from commercialising the invention. The researchers must inform the institution if they believe they have made an invention that can be patented. In order to stop the institution from taking

¹⁸ *Onderzoek Nederland*, no. 86, September 27, 2002

¹⁹ *Onderzoek Nederland*, no. 82, June 2002



over the intellectual property right, the researcher must make use of his or her right to publish the results within one year after the institution was informed. Incomes from the commercialisation of inventions are to be divided between the institution and the researcher. The law does not say anything about percentages or on how the institution is to spend its part of the income. When the research project is to be financed by external sources, there must be set up a contract between the financiers, the institution and the researcher regarding the intellectual property rights before the research project starts. Parliament has accepted the government proposal. The amendment took effect on 1 January 2003.

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 was about 154 million NOK (€ 19 million) in 2001. According to the State Budget²⁰, 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 is five years. Another objective is to give the first preliminary pronouncement within six months. The Patent Office is trying to reduce the amount of time used in managing applications. Unfortunately the backlog is growing and the Office does not believe it will be able to remedy the situation this or the next year. For more information on the Patent Office, see the Norwegian Trend Chart Report for May 2001.²¹

Norway has so far not become a member of the European Patent Organisation (EPO).

PORTUGAL

Following its reorganisation (PT 14), the National Institute for Industrial Property (INPI) became much more active, flexible and 'open-minded', with a culture of service, pro-active involvement in innovation issues, and networking. Relevant actions undertaken in this field were SIUPI, the Industrial Property Incentive System (PT 18), aimed at encouraging companies to make an increased use of industrial property mechanisms, namely patents, and the creation of the GAPIs network (PT 26). This action was carried out in the context of POE partnerships and public initiatives measure. GAPIs, the Industrial Property Support Offices, are light structures to provide professional advice on the use of industrial property rights as well as to raise the awareness about the competitive advantages associated with industrial property. The success of this action led to the extension and strengthening of the network; a new initiative is to be launched in this regard. The recognition of the key role of industrial property in protecting innovation and the performance of INPI led the President of the Republic to include INPI among the organizations visited in the above mentioned 'Innovation Week'.

The main development occurred in the period covered by the present report was the publication of a new Industrial Property Code (Decree-Law no. 36/2003, of March 5). The new code is envisaged as an instrument for promoting innovation. It is argued that the good utilisation of this code depends on a collective effort for promoting innovation, in its several dimensions²². The main changes introduced by the new code include the acceptance of foreign language words as trademarks, the introduction of the concept of prior registration of industrial designs and models, the possibility of option of prior exam for utility models, the parallel between utility models subject to previous exam and patents, and the adoption of EU regulations, namely in what regards biotechnology inventions.

SPAIN

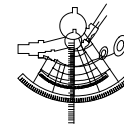
The exploitation and commercialisation of technological innovations has been a priority line in the IV R&D Innovation National Plan. The IV R&D National Plan foresees financial support to stimulate patent application processes when the invention has been generated in an innovation Project supported by the PROFIT Programme (ES 17) or national R&D programmes (ES 13).

In addition, several measures to boost protection of results achieved by researchers have been launched. Between these measures we can find simplification of patent application process (Law of Trademarks, 2001) and introduction of the novelty examination in the application process (Royal

²⁰ St.prp.nr.1 2000-2001 Ministry of Industry and Trade, pp. 56

²¹ 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.*

²² Andrez, Jaime, 'Um Código ao Serviço da Inovação', *Marcas & Patentes*, Ano XVIII, no. 3, 2003.



Decree 9996/2001). These modifications strengthen and add value to innovation and intellectual property. On the other hand, in order to stimulate research and patent exploitation in public research centres, the Royal Decree 55/2002 regulates researcher's participation in benefits from exploitation patents.

The last reform to conclude modernisation of the industrial property legal framework, carried out during the 2001-2003 period, was the reform of the Industrial Design Protection System. This reform establishes an easier and more flexible system of industrial design protection. Changes introduced in the application process to protect industrial design, will speed steps to get this protection and simplify payment of fees. The new Spanish Act creates a 'grace period' and now the applicant has 12 months to apply for the protection from the time that the design was made public. There is also a significant time reduction for the final registration of the designs. The fee's progressive reduction is another improvement of the new legislation. The importance of this measure lies in the fact that the competitiveness of several industrial sectors is based in industrial design, and because of this, the measure will be very useful to improve entrepreneurial competitiveness.

Finally the Spanish Office of Patents and Trademarks (OEPM) has just implemented a programme to speed up the procedure of obtaining patents. This new procedure will give response to situations in which it is necessary to obtain a patent urgently (i.e. negotiation of licenses, technology transfer offers, etc.).

SWEDEN

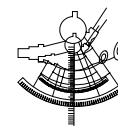
According to Swedish law, researchers at universities retain the ownership of patents. This constitutes an exception from the general regulation on patents on ideas developed by employees. This feature has been under debate for some years for several reasons. The case for passing ownership rights to the higher education institutions is based on the argument that this would give universities an incentive to become more active in promoting the 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 academic freedom of communication and economic efficiency. Here they argue first that professors should not be coerced into secrecy agreements, etc., against their will, and in the case where a researcher chooses to commercialise results, the university should be able to monitor that he or she keeps a proper balance between academic values and economic efficiency, rather than have the university 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 2000²³. VINNOVA recently received a special mandate from the government to draw up proposals for better conditions for exploitation of research results. This spring (2003) the evaluation was published. It suggested that there should be no change in the right of university researchers to keep the ownership of patents. VINNOVA suggested a programme to increase the ability of Universities and University Colleges to support researchers in the process of commercialisation. In the evaluation VINNOVA also suggested better opportunities for researchers to move between the industrial and the academic spheres.

During the 1990s, *Forskarpatent* (Patents & Licensing Offices) were set up at the major universities in Sweden to assist the researchers in the patenting and licensing processes. 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. This office issues authorisations to publish periodicals, and offers a number of commission services and training courses. The more comprehensive activities performed by PRV have to be fully financed by the users/clients.

²³ Proposal 2000/01:3 *Forskning och förnyelse* (Government Bill - Research and Renewal)



In addition to the PRV authorities, very few public schemes exist that are exclusively aimed at stimulating the use of the IPR instruments. However, as part of 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), advice is given on the strategic and tactical use of IPR and on utilisation of information contained in patents. Some other agencies and research councils (e.g. the EU RTD Council) include training and advice activities on IPR matters in their general programme. They also offer partial funding of IPR costs, whenever necessary, after an overall consideration of the total project concept.

United Kingdom

The UK government is committed to ensuring that the intellectual property regime in the UK and in Europe continues to provide incentives to research an innovation. It is keen to deal effectively with the challenges to IPR policy posed by scientific advances in fields such as genome research and by 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, trade marks and designs. The committee also gives independent advice on identifying and responding to emerging and strategic issues²⁴.

In the meantime, the Patent Office continues to focus 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;
- Work towards the early introduction of a world wide system for electronic trading in IPR and investment in IT to automate the UK IPR system; and
- Work with the Small Business Service to ensure SMEs have ready access to information to help them obtain the protection they require.

In May 2003, the Patent Office released the results of a public consultation on grace periods²⁵. The main conclusion was that there appears to be support for a limited grace period, albeit with a lot of burden on the applicant to prove that they are entitled to it.

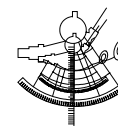
The Patent Office also launched a consultation²⁶ on proposed changes to its 25-year old patent laws in November 2002. The proposals set out the most significant updating of UK patents legislation since the introduction of the Patents Act in 1977 and form an essential step in deciding what measures will be included in new legislation. Such changes are necessary for the UK to deliver on its commitment to implement recent changes to the European Patent Convention, with which UK patent law is aligned. (the UK is the third largest European user of the system). The proposed changes will, for example, encourage investigation of new medicinal uses for known pharmaceuticals, and make it easier for businesses to maintain and protect their patents once granted. Administrative procedures should also be simplified.

The Patent Office has also issued a Practice Notice clarifying the UK's position on inventions involving human embryonic stem cells. Issued in April, the notice notes that 'On balance, the commercial exploitation of inventions concerning certain types of human embryonic stem cells (pluripotent cells) would not be contrary to public policy or morality in the UK and they should not be excluded from patentability'.

²⁴ See <http://www.intellectual-property.gov.uk/ipac>

²⁵ Available at: <http://www.patent.gov.uk/about/consultations/responses/grace/grace.pdf>

²⁶ See: <http://www.patent.gov.uk>



The government also continues to provide a dedicated online help service to promote the use and understanding of IP issues²⁷, together with other forms of advice and assistance on IP matters (UK 45 and UK 48, for example). Also ongoing is the Fund for the Commercialisation of IP in PSREs (UK 52).

The government's ongoing Lambert Review of higher education and research has been examining submissions from a number of highly influential organisations. The review, which has received a large number of submissions from over 300 higher education institutions, professional bodies and businesses, is currently in its consultation and analysis phase with the delivery of its final report due for the end of October 2003. However, Lambert has released a number of preliminary findings and early indications are that the final outcomes are likely to be less radical than some had expected. Apparently, the review has identified the ownership and trading of IPR as a major area of disagreement between industry and academe. Possible solutions to the problem are thought likely to lie in simplifying the arrangements by which IP can be allocated.

In addition, one of the twelve themes or work streams covered by the DTI innovation review, also due to report in October, concerns IPR and Design – namely how to improve the role of organisations such as the Patent Office and Design Council, how well does the IP framework at national, EU and international levels serve UK business and the academic community?

BULGARIA

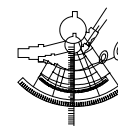
In 1999, copyright infringement accounted for as much as 80% of the entire Bulgarian software market. As the IT sector grew and local business became stronger, the industry lobby started putting pressure on the government to crack down on illegal copies of copyright sales. As a result, the software piracy rate dropped to 75% in 2001, and it had dropped to 70% in 2002. The government drafted some amendments to the Copyright Law and neighbouring rights, which entered into force early 2002. Moreover, it plans to further improve its application and extend its protection.

The patent law rules that all acts relating to the filing of patent applications, proceedings before the Patent Office, grant, publication and maintenance of patents shall be subject to fees payable in accordance with a tariff established by the Council of Ministers. According to the patent law, fees for filling, examination and appeals against examination decisions shall be paid at a reduced rate according to the tariff. Provided that the applicants are the inventors themselves, micro- or small enterprises under the Law on the Small and Medium-Sized Enterprises, state schools or academic research organisations have received financing from the state budget. Where a patent application is filed together with a written statement of willingness to license, the fees payable under the preceding paragraph shall be reduced by 50%.

Bulgaria cooperates with the World Intellectual Property Organisation (WIPO) to modernise the intellectual property system with the purpose of increasing the competitiveness of SMEs, industry, R&D and other organisations. The results of this cooperation should be that the entrepreneurs are better aware of this intellectual property system and that the share of patents used in production increases. In 2001, over 50% of registered patents belonged to members of the Bulgarian Academy of Sciences.

Also of relevance is the fact that company law has been further aligned, but still requires to be brought fully into line with guidelines as set out by the *acquis*, especially on acquisitions, mergers and divisions of companies. From 1997 to 2002, progress has been made in the implementation of company law, where problems existed due to insufficient knowledge and experience in the judiciary of company and commercial law issues, in particular company insolvency proceedings and law enforcement being also hampered by deficiencies in laws relating to privatisation and concessions. In regards to the legal framework for protecting intellectual and industrial property rights (IPR), there have been further improvements. However, further steps need to be taken in regard to enforcing border controls as well as intensifying training for law enforcement bodies and the judiciary handling IPR matters.

²⁷ See: <http://www.intellectual-property.gov.uk/>



CZECH REPUBLIC

The Industrial Proprietorship Office is responsible for the protection of industrial property rights, the Ministry of Culture is also competent in the field of intellectual rights protection, while the company law is under the jurisdiction of the courts and the Ministry of Finance is responsible for combating piracy in the field of customs.

Since 1997, the Czech Republic has made steady progress in this area, particularly in the transposition of industrial and intellectual property rights. Gradual progress has also been made with regards to strengthening administrative capacity. The enforcement of intellectual property rights has been substantially strengthened, in particular through legislative reforms. Training activities for improving the specialisation of the judiciary are continuing and evolving. Moreover, specialised chambers of regional courts dealing with IPR cases have been established and are operational. In the field of protection of intellectual property rights, a new Copyright Act has been adopted. Also the protection of rights of performing artists, producers of phonograms and broadcasters has been strengthened.

The Czech Republic acceded to the European Patent Convention in July 2002. A new act on the protection of the 'country of origin' was adopted in November 2001 and entered into force in April 2002. The Czech Republic acceded to both the WIPO Copyright Treaty and WIPO Performance and Phonograms Treaty in October 2001.

In the area of criminal enforcement of intellectual and industrial property rights (IPR), the amended Criminal Proceedings Code entered into force in January 2002. This code streamlines the investigation and prosecution of IPR crime, by inter alia shortening the preparatory proceedings, merging the role of investigators and police into one service, strengthening the role of the public prosecutor and greatly reducing the possibility of appeal courts returning cases to lower courts.

An amendment to the Act on Measures Concerning Import, Export and Re-Export of Goods infringing certain Intellectual Property Rights entered into force in September 2002. It introduces new powers for customs officers in the field of counterfeiting and piracy, including the authority to inform IPR holders of the identity of the claimants, and the power to declare goods counterfeited or pirated within the framework of legal proceedings. A single contact point has also been set up for the submission of requests for enforcement action, and such requests may be made in electronic form.

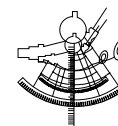
In order to complete preparations for EU accession, the Czech Republic's present efforts focus on intensifying measures to combat piracy and counterfeiting, strengthening border controls and, more broadly, further improved co-ordination between enforcement bodies (customs, police, judiciary). With regard to intellectual property rights' enforcement, the high levels of software and music piracy remain a source of concern. Enhancement of the administrative capacity of enforcement bodies, including controls against cross border trade of pirated and counterfeited goods and better co-ordination among enforcement bodies, remain a matter of priority.

ESTONIA

Protection of intellectual and industrial property issues has become more relevant only recently. Therefore at the end of 2002, several surveys in this area were carried out, and in 2003 the Ministry of Economic Affairs and Communication developed measures to foster IPR protection.

Estonia has re-established its tradition of industrial property and has a genuine appreciation of the importance of industrial development. Estonian laws are well advanced to enable the protection of intellectual and industrial property rights and Estonia joined the European Patent Convention (EPC) on 1 July 2002. Furthermore, Estonia is a signatory to the main international treaties. During the last nine years, the EPO has undertaken substantial technical cooperation projects with the Estonian Patent Office. Estonia has been a supporter and beneficiary of the Regional Industrial Property Programme (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 handling 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 examined during the restructuring process of innovation and technology centres.

At the end of 2002 a survey was carried out to describe the situation of Industrial Property Rights in Estonia, while a survey on awareness of industrial property rights among SMEs was carried out at the end of 2002. Currently, the Technology and Innovation Division of the Ministry of Economic Affairs and Communications is developing the overall framework for fostering and supporting IPR protection in Estonia. According to government plans, the framework and measures should be ready by summer 2004.

Currently public policy involves mainly university spin-offs through the SPINNO programme (ES 17), which trains researchers on IPR issues. Also the enterprises that apply for a grant or loan for product development from EAS have to also prepare the chapter about IPR protection related to their projects. So the promotion and awareness raising is presently carried out through the SPINNO programme, which is targeted to universities and spin-offs. Consultations are provided by Estonian Patent Office and through ESTAG and some extent also through other business support organisations.

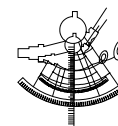
In the wider scope of protecting intellectual and industrial property in society, the problem remains law enforcement, the administrative capacity to fight piracy and the sale of counterfeited goods. According to a study by Datamonitor, a research company, software piracy amounted to 69%, in 2000, and the Estonian market had to bear the costs of EEK 1.1 billion (€70.9 million). Although the share of piracy has dropped as compared to 86% in 1998, it remains above the EU average. Since the end of 2000 the government has made a concerted effort and increased raids on market places known for selling counterfeited goods. Similar operations have been introduced at border crossings to reduce smuggling, including counterfeited goods. A special task force has been set up to aid the Tallinn Police Office to fight piracy. Customs officials and economic police officials, in cooperation with organisations representing intellectual property rights on how to detect counterfeited goods, receive ongoing training.

HUNGARY

The Hungarian constitution and legal system provide strong protection for the acquisition and disposition of property rights. Patent protection in Hungary covers the use, sale, offering for sale, and import of a patented product or products made using a patented process. The definition of infringement has been extended to include 'supplying the means'. A person who sells or offers to sell the means of producing a patented product is liable if that person is proven to have known that the means could be used for infringement. An example is the sale of decoder boxes that would allow the user to pirate a cable signal.

Under the revised Patent Act, effective 1 January 1996, an invention may be patented if it is novel and has industrial application. The patent application process takes from six months to one year, and patents are issued for a period of twenty years from the filing date. Foreigners applying for a Hungarian patent must be represented by an authorised Hungarian patent agent. Hungarian patent law conforms to the guidelines of the European Patent Convention, to which Hungary is a signatory. Trademarks may be granted for any product-distinguishing sign capable of being graphically represented. They are issued for a period of ten years, and may be renewed at the end of each ten-year period upon the owner's request. The Hungarian Patent Office (MSZH, www.hpo.hu) has original jurisdiction on both patent and trademark disputes.

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 resulted in the reinforcement and extension of the competence of the HPO. As a result of the amendment, the HPO became the administrative authority for the protection of intellectual property rights with countrywide competence having independent functions and competence under the direction of the government. Its President is appointed and released by the Prime Minister. Following 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 concerning the tasks, competence, organisation and direction of the HPO. In this



context, the Organisational and Operational Rules were also renewed: the new Rules were approved on behalf of the government by the Minister of Economic Affairs, and were published upon the order of the President in the HPO's official bulletin. The Rules entered into force on 1 December 2000. The establishment, in December 2000, of the Hungarian Council for the Protection of Intellectual Property resulted from the new statutes and the new rules. As a result of this institutional reform, the HPO can operate and prepare for the European integration with clear and enlarged competencies.

The IPR Helpdesk at the Ministry of Education – Department of R&D Strategy, National Contact Point helps SMEs to have current information on the Hungarian and international patent rights (http://www.om.hu/ist/fp5/hun_IPR_Intro.asp)

According to the Hungarian Budget for 2003 total funds of €65,708, from the Ministry of Economics and Transport, are available to support patenting procedures abroad.

LATVIA

The Ministry of Justice, respectively with the Latvian Patent Office, its subordinate, is responsible for enforcing industrial property rights, including drafting of laws and regulations in the field of patent, design, trademark and topography of the protection of semiconductors. The Ministry of Agriculture is in charge of protecting plant varieties. The Ministry of Culture is responsible for copyright and neighbouring rights area. The Ministry of Economy, in particular the Competition Council is in charge of protecting against unfair competition. The Ministry of Justice, Ministry of Culture, Ministry of Finance, in particular the Economic Police, Customs Office, Prosecutors' General Office, are intellectual property rights enforcement bodies.

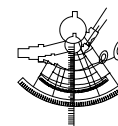
In August 1999, Latvia became a member of the Rome Convention for the protection of actors, producers of phonograms and broadcasting organisations. In February 1999, TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights) became applicable to Latvia. Moreover, the Cabinet of Ministers also adopted the Regulations on Customs Control Measures for the Protection of Intellectual Property in 1999. In July 1999, the new Law on Trademarks and Indications of Geographical Origin entered into force, and in December 1999 Latvia became a party to the Trademark Law Treaty. During January 2000, Latvia acceded to the Protocol of Madrid Agreement, regarding the International Registration of brands. In March 2000, Latvia joined the WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty. In 2000 the Copyright Law came into force and the parliament also adopted amendments to the Criminal Law, relating to copyright protection. Also in 2000, the government adopted the revised Corruption Prevention Programme. In 2001, the provision on the order in which customs must take actions for protecting intellectual property (LV 37) was adopted by the parliament. The experts Council of the Ministry of Economy have on their agenda the approval of the implementation of the Strategic Development Programme for ensuring Intellectual Property Development and Protection in 2000-2005, which was developed in 1999.

The Copyright Law, 2000 does not protect ideas, methods, processes and mathematical concepts. Latvian Patent Law does not provide the protection of software as such. However, specific processes related to software are subject to protection i.e. software of a technological character (specific process oriented). The protection of biotechnological inventions could be carried out within the scope of the existing Patent Law.

In May 2003 the Cabinet of Ministers passed the Order (Provision) On Conceptual Changes in Intellectual Property Protection Laws (LV 65), which is the most recent measure for this action line. Among its goals to avert the three most prominent problems regarding intellectual property in Latvia is to secure the correspondence of national laws to the World Trade Organisation agreement on marketing aspects of intellectual property.

LITHUANIA

In Lithuania, the priority of IPR protection was recognised just after Lithuania regained its independence in 1990. In the past five years, the strengthening of protection of intellectual property rights at the national level, as well as at the international level, continued. The policy in the sphere of IPR has always been directed at strengthening IPR protection and will continue to do so.



However, a number of steps were taken to implement existing IPR protection in Lithuania, and several policy documents relating to intellectual property were introduced. During the past five years Lithuania became a member of the protocol relating to the Madrid agreement concerning the international registration of marks (1998), Trademark Law Treaty (1998), Budapest Treaty on the International Recognition of the Deposit of Micro-organisms for the Purposes of Patent Procedure (1998), TRIPS. A number of new laws, which aim to strengthen the IPR protection, were enacted during recent years – new version of Law on Designs (2003), Law on Protection of Intellectual property in import and export of goods (2000), Law on Trademark and Law on Firm Names (1999). Currently the national legal acts are harmonised along the *aquis* of the EU. A Strategy of IPR protection was foreseen, to be prepared during 2000. However, it has not yet been completed.

POLAND

Due to a certain backwardness of Polish industry, historically Polish decision makers have believed that better and quicker results in industrial development may be achieved through imports of licences and ready made high-tech goods than by supporting domestic inventors and innovators. There was also a prevailing opinion that even when valuable inventions apt for patenting may be devised, they are usually a result of the teamwork in large enterprises or institutes. Such a way of thinking survived up to the beginnings of this century together with a conviction that individual inventors and authors of other innovations do not need special measures. The general concept was that the enterprises or R&D units themselves should care about the protection of intellectual and industrial property. A consequence of such an approach was a lack of special measures other than rules foreseen by patent law and copyright law. Many years of such a policy brought negative results.

In 2000 the average indicator of innovativeness was 0.6 for Poland and 2.6 for the EU. Poland is not a member of the European Patent Organisation (EPO) and Poland's Patent Office works ineffectively and is in a structural crisis. There are delays of 7-8 years in issuing patent certificates for inventions. Even in the case of simple registrations of trademarks, delays of 3-4 years are frequent. 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, however, visible improvement as regards to trademarks and copyrights. The latest legislation, passed in 2002, has considerably strengthened copyright protection in Poland and has contributed to curtailing piracy.

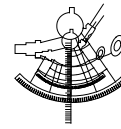
The law on protection against unfair competition protects Polish and foreign companies from activities such as:

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

In its preparations for EU membership, Poland has already adopted, starting this year (2003), the EU norms on the safety of merchandise. In most general terms, this means that producers bear criminal and financial responsibility to the users of their products and consumers for defects that might be found in their products. On the other hand, there will be fewer problems with placing merchandise on the market. It should be noted that Poland was granted the longest transition period (until the end of 2008) for implementing the EU procedures for registration of pharmaceuticals.

ROMANIA

The Law of 8 June 1996, regarding Intellectual Property, established the Romanian Office for Intellectual Property (ROIP), formerly called the Romanian Agency for Protecting Intellectual Property. ROIP is a specialised agency subordinated to the Romanian government and financed from the state budget. Regarding the legislation to be adopted under the *acquis* 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 programs by business entities.



In a World Bank report (2002), on the transition of Eastern European countries, a 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 (2002), 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 they are seldom or never consulted about new rules and law reached more than 95% in Romania²⁸.

Romania has extended the patent rights to software. The Law 8/1996 regarding the copyrights for software programs was revised in 2003 after the industry's push, because according to Datamonitor, the market survey company in charge with measuring damages inflicted by software piracy, software makers incurred losses of €17.3m in 2002 alone.

The Law 64/1991 regarding patent rights was revised in October 2002 so as align it with EU legislation regarding the patent rights. The Law 64/October 2002 regarding patenting, encourage patenting by public research and universities by offering 50% deduction for the registration taxes to State Office for Trade Marks. The Patent Law no. 64/2003 contains the rules for licensing public IP, contains explicit indications on how to register and publish a patent, on what basis a public IP can be obtained. It also contains rules about the transfer of rights about rights and obligations and about defence of rights and inventions.

Matnantech Programme (RO 16), a new programme initiated in 2002, which is a component of the National Plan for Research, Development and Innovation 2001 - 2005, refers to new materials, micro- and nano-technologies. Moreover, a chapter is dedicated to the protection of intellectual property rights. In essence, the Matnantech programme was introduced to enforce the fair use exemption, particularly for public sector research. The Biotech Programme (RO 15), also a new component of the national Plan for RDI 2001-2005, refers to biotechnologies and includes a chapter regarding the Intellectual Property protection.

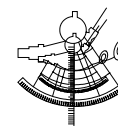
There are five institutions involved in making sure copyright legislation is enforced: The Romanian Office for Copyright (ORDA), the Police, the Prosecution, the Courts and the Customs and Border Police. The whole system is sometimes ineffective largely due to bad information management between the parties involved. The Romanian General Prosecution authority (PGR) teamed up with the Business Software Association (BSA) and representatives of other IP-related industries (recording, publishers) to offer a comprehensive training programme, which is co-financed by PGR and BSA.

About four years ago, copyright infringement would account for as much as 90% of the entire software market. As the IT sector grew and local business became stronger, the industry lobby started piling pressure on the Government to crack down on illegal copies of copyright sales. The software piracy rate did drop 1-2% in 2002 compared to 75% in 2001. Business Software Alliance, the international organization that is in charge of pursuing copyright policy both worldwide and in Romania hopes to trim piracy rates by some five percent in 2003. At this point the software industry has helped push through legislative amendments to the two relevant acts, Act 8/1996, the framework copyright law, and Government Ordinance 202/2002, which updates legislation to the latest provisions as outlined in the global TRIPS treaty (the WTO's copyright instrument to discipline countries that condone copyright infringement).

MER together with other entities involved in the field of intellectual property (OSIM, ORDA, MIMMC, MJ, MI, General Directorate of Customs, ANPC, MAE, MIE) drew up the 'National Strategy in the field of intellectual property (2003 – 2007)' and submitted it to the WOIP for review. As a result of the cooperation between the Romanian Government and WOIP it was approved and signed and it provides the optimal legal framework for the development of the cooperation with WOIP in the field of intellectual property.

SLOVAKIA

²⁸ Bucharest Business Week, January 21-27, 2002



Intellectual property rights (IPRs) are essential to knowledge generation. Based on this premise, Slovakia has now broadly established a legal framework for IPR in line with the *acquis*. In terms of innovation, the overall benefits of IPRs for developing economies are ambiguous: a strong IPR framework can hinder diffusion and encourage investors to licence instead of investing. While some of these concerns may be of relevance for Slovakia they are largely outweighed by the benefits, which should accrue to the economy via, for example, increased Foreign Direct Investment. Weak IPR rules deter foreign investors from entering into R&D intensive sectors. In addition, Slovakia is a small economy, which has to follow a policy of openness and economic freedom for which strong IPRs are an indispensable element.

Slovakia is a member of the World Intellectual Property Organisation and of the European Patent Office (EPO).

Intellectual property protection is guaranteed by the Industrial Property Office of the Slovak Republic, which is a central state administration body and is competent in a field of industrial property. The Office makes decisions on granting protection on inventions, industrial designs, utility models and topographies of semiconductor products, trademarks and on appellations of origin of products. The objects, which are protected under the laws of the Slovak Republic, are: patents, utility models and industrial designs, topographies, trade marks and the designation of a product's place of origin.

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 went 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.

Act No. 577/2001 Coll., which amended and supplemented Act No. 55/1997 Coll. on Trademarks, became effective from 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 issues 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. In 2002 the Electronic Signature Act. No. 215/2002 was adopted.

SLOVENIA

Slovenia was one of the first transition countries to pass a contemporary law on industrial property (2001). The Slovenian Intellectual Property Office. SIPO, established in 1992, operates within the Ministry of Economy. SIPO is in charge of industrial property, including the protection of patents, industrial designs, trademarks, copyright and related rights, and the collective administration of authorship. SIPO is signatory of all-important international agreements in the field of intellectual property.

A more recent development has been the debate on protection of intellectual property and patenting at the public research institutes and universities, following the discussions in international science circles. So far, no uniform solution is provided for, so each institution sets its own rules as to the distribution of income derived from the intellectual rights. With the promotion of university spin-offs (the incubators SO 13) this issue will require a more systematic solution.

European Trend Chart on Innovation

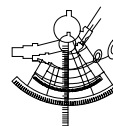
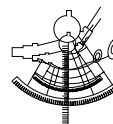


Table 1: Categorisation of IPR policy measures by mode and target.

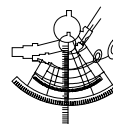
Country	Instruments	Date	Modes							Targets								
			Intermediation/development of cooperation	Services/Consultancy/Training	Awareness raising & management of IPR	Subsidies for acquisition of IPR/research	Support for IPR development/registration	Valorisation/promotion of research results	Legal environment	Other	SMEs/Industrial SMEs	Companies/Industrial companies	Managers	Individuals	Research institutes/Researchers	Students/Graduates	Public Authorities/Organisations	Universities
Austria	AT 45 Innovation Agency	1984	1	1						1								
Austria			1	1	0	0	0	0	0	1	0	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 22 Steun voor immateriele investeringen ('Support for immaterial investment')	?				1	1	1			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	BE 68 Subsidy for patent registration and protection	2003					1				1							
Belgium			0	0	1	4	4	2	0	2	6	4	0	1	3	0	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	0	1	0
Finland	FI 9 Improving the use of research results at universities	1999						1										1
Finland	FI 10 Technology transfer from universities and research institutions	1999			1						1						1	1
Finland			0	0	1	0	0	1	0	0	1	0	0	0	0	0	1	2

European Trend Chart on Innovation



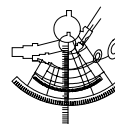
France	FR 32 INPI's Innovation Awards	1991						1							1				
France	FR 33 Technology Platforms (PFT)	2000			1						1				1	1		1	
France	FR 34 RIAM (Research and Innovation for Audiovisual and Multimedia)	2001	1				1				1	1	1			1			
France	FR 37 RMNT (French Research Network in Micro and Nano Technologies)	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)	2001																	
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			9	0	1	2	1	2	0	0	2	9	8	0	0	10	1	0	7
Germany	DE 6 Promotion of Inventors at the Patent Office for German Research	1955				1	1					1			1	1			
Germany	DE 7 Information Centres	1980	1	1		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 at Higher Education Institutions	2001						1	1								1	1	
Germany	DE 72 Commercialisation of Intellectual Property at Public Science	2001	1				1	1			1					1		1	
Germany			2	3	1	2	3	2	1		3	4	3	1	3	4	1	3	5
Greece	GR 1 Investment Law - Innovation	1994					1					1	1						
Greece	GR 34 Law 2697 "Certify of Locarno's settlement for the International classification of the Industrial Design and Models	1999						1				1	1						

European Trend Chart on Innovation



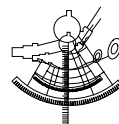
Greece	GR 42 Awards and Financial Support for Inventors	2000					1								1				
Greece			0	0	0	0	2	0	1		0	2	2	0	0	1	0	0	0
Ireland	IE 6 Protection of Copyright - Copyright Bill	?							1			1	1		1				
Ireland			0	0	0	0	0	0	1		0	1	1	0	1	0	0	0	0
Italy	IT 28 Protection of Copyright - Copyright Bill	1999							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
Netherlands	None																		
Netherlands			0	0	0	0	0	0	0		0	0	0	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
Spain	none																		
Spain			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0
Sweden	none																		
Sweden			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0
UK	UK 13 Intermediaries' Workshops	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						
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

European Trend Chart on Innovation



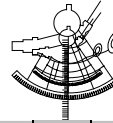
UK	UK 52 Fund for commercialisation of IP in PSREs	2001						1	1						1			1	1	
UK			1	2	2	0	2	2	4		6	5	5	2	2	3	1	2	3	
Cyprus	CY 4 Law 16(I)/98, No. 3234 Patent Law and amendment under No. 21(1) of 1999	1998							1						1					
Cyprus			0	0	0	0	0	0	1		0	0	0	0	0	1	0	0	0	
Iceland	None																			
Iceland			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Israel	none																			
Israel			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Liechtenstein	None																			
Liechtenstein			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Bulgaria	None																			
Bulgaria			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Czech Republic	None																			
Czech Republic			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Estonia	None																			
Estonia			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Hungary	None																			
Hungary			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Latvia	LV 31 On a work group implementing the concept of e-commerce	2001							1		1									
Latvia	LV 37 On order in which customs must take actions for protecting intellectual property	2001							1		1									
Latvia	LV 40 Electronic Administration Concept: strategic plan for government administration modernisation	?							1		1							1		
Latvia	LV 42 On the Commercial Law Coming into Force	?							1		1									
Latvia	LV 47 Rules on the standard of the state Academic Education	?																	1	
Latvia			0	0	0	0	0	0	4		4	0	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	
Poland	None																			
Poland			0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
Romania	None																			

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Romania		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slovakia	None																	
Slovakia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slovenia	None																	
Slovenia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Austria		1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Belgium		0	0	1	4	4	2	0	0	2	6	4	0	1	3	0	0	3
Denmark		0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0
Finland		0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	1	2
France		9	0	1	2	1	2	0	0	2	9	8	0	0	10	1	0	7
Germany		2	3	1	2	3	2	1	0	3	4	3	1	3	4	1	3	5
Greece		0	0	0	0	2	0	1	0	0	2	2	0	0	1	0	0	0
Ireland		0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0
Italy		0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0
Luxembourg		0	1	2	0	1	0	0	0	0	2	1	0	0	0	0	0	0
Netherlands		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway		0	1	0	0	1	0	0	0	0	1	1	0	1	0	0	0	0
Portugal		0	1	2	0	1	1	1	0	2	1	2	0	1	3	0	2	1
Spain		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweden		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UK		1	2	2	0	2	2	4	0	6	5	5	2	2	3	1	2	3
Cyprus		0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
Iceland		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Israel		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liechtenstein		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (EU 15+)		13	10	11	8	15	10	10	0	17	34	34	3	9	25	3	9	21
Bulgaria		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Czech Republic		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Estonia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hungary		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Latvia		0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	2	0
Lithuania		0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0	0

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Poland		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Romania		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Slovakia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Slovenia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total (Acc+CMS)		0	0	0	0	0	0	0	7	5	0	0	0	0	1	1	0	2	0