

SMEs and IP:

Results of a Europe-wide training needs and methodologies analysis

Ip4inno executive summary: WP2 training needs report





About the ip4inno project

The first phase of the **ip4inno** project took place between January 2007 and December 2008. The main **aim** of ip4inno was to increase the **understanding and usage of intellectual property (IP)** by Small and Medium Enterprises (SMEs), with a view to increasing innovation and competitiveness in line with the Lisbon goals. The project aimed to achieve this ambitious objective by:

- Building a Consortium using a “**pooling approach**”, integrating an important number of actors undertaking similar or complementary activities in the field of innovation. Synergies were exploited to perform common analyses and to design enhanced services;
- **Analysing** the training needs of the target groups in the field of IP management;
- Providing **training** for specific target groups in the protection and exploitation of IP and IP management, with the main focus being on patenting;
- Disseminating and facilitating the exchange and dissemination of information and **good practices**, including training packages within several European countries.

This report focuses on summarising¹ the results gathered in the analysis of the training needs in the field of IP management for different target groups.

About the study on SMEs' needs

The study took place in early 2007 and consisted of a **schematic and comprehensive analysis** of the needs of SMEs across **9 member states** and Croatia, Switzerland and Turkey. Secondary input came from Europe-wide trainers in IP / business-oriented issues who provided recommendations for training methodologies **with particular regard to SMEs**.

The study was considered as crucial as it is evident that there is a **need for a greater understanding of the SMEs' general attitude to IPR**, besides gathered statistical data on how much they know, how they use this knowledge, what their difficulties in using it are, and how they can **improve the strategic use of IP in the business model**. European SMEs are often perceived as having little knowledge or interest in IP as a field. The study aimed to determine up to which point this was true, and provide some recommendations to combat this.

¹ Full report available for download on www.ip4inno.eu in PDF format

The methodology was as follows:

– **Gathering of pre-existing information**

A search was made for existing studies with all or partial amounts of this information available. Existing training materials were also gathered in the framework of the project to determine current training trends and availability.

– **Identification of missing information**

From the previous step, missing variables were identified. This constituted vital data which was not already analysed on the needs and preferences of SMEs with regard to IP training.

– **Elaboration of questionnaires to gather new information**

Data-gathering materials were developed, including questionnaires, interview scripts and report templates. These were sent to all project partners, covering some 9 countries² (European Union plus Croatia, Switzerland and Turkey) plus three Europe-wide actors.

– **Identification of results**

Analysis of the responses to the questionnaires and interviews provided some vital insight into the training needs and preferences of SMEs in a representative cross-section of Europe.

The study was conducted under the co-ordination of IEEPI across the 12 countries mentioned and included a total of 698 interviews / questionnaires. The breakdown of target-type was 165 SME intermediaries, 18 Technology Transfer Offices (TTOs) / Researchers and 515 SMEs.

Results of the study

The results from the study can be divided by the type of interviewee, as above.

Results from intermediaries

Intermediaries interviewed for the purpose of the study worked in the business development field, and have a direct or indirect linkage to IP. The main user / target for those intermediaries were small and, generally, young companies. All of the intermediaries interviewed for the purpose of the study considered that **SMEs need to know the real economic value potential of IP**. They also proposed that it is important to focus on how to achieve the goal of **making SMEs use more resources** for IP.

² Countries analysed were: Austria, Belgium, Croatia, Denmark, Finland, France, Germany, Hungary, Portugal, Spain, Switzerland and Turkey.

As for IP usage, intermediaries tend to use patents, trademarks, utility models and, lastly, patent information³. Some also apply trade secret and licensing. Naturally, intermediaries **choose the IP model to apply depending upon the sector of activity** for which the development is intended. One recommendation which intermediaries would like to make is that the **IP system** in its entirety needs to have **greater harmonisation**, and **be easier to understand**.

For the IP strategy of SMEs, intermediaries considered that role of IP should be mainly concerned with

- **monitoring competitors** and new technologies (using patent databases),
- **avoiding counterfeiting**,
- and improving the firm's reputation and **valuing assets**.

From this, it is clear that intermediaries appreciate the possibilities of **IPR as an integral part of a business strategy and as a competitive measure**.

Intermediaries, from their extensive experience dealing with SMEs, affirmed that the main barriers to usage of IP by SMEs are:

- a **lack of IP knowledge** due to either a **lack of information** or the **negative image of IP**,
- a perceived **complexity of the whole process**,
- **the costs related** to IP protection and enforcement,
- and both the **time and costs related to litigation**.

One element which can be added is that there is also obviously a **lack of IP-trained personnel in the average SME**⁴. As a natural conclusion, intermediaries also stated that **priority areas** essential for improving IP application relate to the **development of awareness-raising tools, training and additional information**. They considered high-impact measures to be:

- **Better inform on IP issues**,
- **Increased IP training**
- And to **reduce the time and cost of litigation**.

³ In order of frequency.

⁴ Conclusion from SME interviews and Europe-wide training experiences

For the purpose of awareness-raising, **content of training** sessions will have to be **business-oriented and approach subjects of interest** such as **counterfeiting, commercial valorisation, and licensing**. Other comments included the **need to simplify the support procedure for SMEs** in IP issues. The **target for such trainings** should be mainly **young SMEs**, but there is also a place for training directed at both high-tech and low-tech ventures. Interestingly, intermediaries felt that **training should be sector-specific rather than specific to the type of SME** for two main reasons:

- the degree of difference between sectors is large, **specificities of certain sectors** should be described
- and training should be **directed to those sectors where the cost of development would justify the effort of specific IP measures**.

Intermediaries had little conclusions on the format of training sessions, and held very distinct and non-conclusive attitudes on the subject. One aspect which was clear, however, was that **sessions should be short as SMEs dispose of little time for such exercises**, and **introductory-level training** lends itself to shorter sessions. On a secondary level, more specific or **advanced training could be used with smaller groups**.

To conclude: **intermediaries are convinced of the economic and strategic potential of IP for SMEs**.

Results from Technology Transfer Offices (TTOs) and Researchers

The researchers interviewed for the purpose of the study have widespread experience in their field and have produced significant research results. In all cases presented the University **TTOs were responsible for managing IP** issues. Researchers tend to use two main types of IP and IP resource: patent information to examine what has already been developed, and patenting for protection. In terms of effective usage / access to IP, both TTOs and Researchers cite

- the **priority placed on publication of results / research**,
- the **cost of filing** which is not always an option,
- and the **complexity and duration of procedures**.

Researchers obviously **considered that increased awareness would have extensive impact**, increasing access to knowledge and public funding. In fact, as **publicly funded Higher Education Institutions, their main barrier relates to costs and financing**. Secondly, researchers consider that **development of IP should be valued more highly in academic evaluation**, alongside other activities such as publication, participation in

confederacies, etc. Both **researchers and TTOs consider that IP would be useful in strengthening Higher Education Institutions.**

Results from SMEs

SMEs interviewed affirmed that the **creation of new products and services is a fundamental part of their activity.** Consequently, this means that IP should be part of their strategy. Those SMEs interviewed which did use any IP measures, used trademark protection (including internet domain names), patent information, patent protection and design protection⁵. Those who developed some IP related activities or had an IP strategy usually had the following at the core of their strategies:

- A **heavy focus on image**, or a means to improve the reputation of the firm and the value of the company's assets / carry out advertising,
- **Focus on competitors** to hinder or block them and to also **avoid counterfeiting**,
- Focus on **knowledge**, in the main by using patent databases.

One of the SMEs interviewed summed up the issue in very clear, defined terms; **“companies generally use IP protection however mainly without clear strategy. If they have a strategy, they are more focused on the defending aspects of IP strategy than on the proactive usage of IP.”**

Primary responsible persons for IP issues in SMEs tend to be at management level, followed by those working in R&D or business development areas. This indicates that, **whilst management places importance on IP as an area, IP management is not generally in the hands of a specialist.** Many SMEs use specialist patent agents or attorneys to deal with the more complex issues of IP management. They use these specialists as the **complexity and costs associated with IP (time, money and human resources needed) are seen as a hindrance for in-house treatment.**

It is interesting to note that, from those surveyed, **only 2/3 of the persons dedicated to IP issues had had access to IP training or education.** In the majority of the cases, that IP education or training was made up of short duration courses or seminars and were not higher education certifiable.

SMEs considered, in line with intermediaries, that their main barriers for using or considering IP management were:

- **Lack of knowledge**, and a subsequent **lack of understanding** of their options,

⁵ In order of frequency of usage.

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- Lack of **available time**,
 - The issues of **costs**.

Even more specifically, SMEs pointed out **in particular the duration of procedures, their complexity, the time and cost needed for litigation and the lack of trained persons**. Related to costs, the study uncovered that the amount of financial resources dedicated to IP varies somewhat according to the sector of activity and growth of the business, but most **SMEs interviewed devoted very little income to IP (less than 5000 € per annum)**. SMEs also **request simplified legislation and a more homogeneous IP system**. They consider that the current system is too bureaucratic. Information and training are also priority issues for SMEs. In order of priority, SMEs consider that, to improve the system, the following factors are important:

- Better information for SMEs on IP issues,
- **Increase of state funding**,
- **Reduction in the process duration**,
- And reduction in the costs for filing.

For the subject of training / awareness raising, it was nevertheless difficult to determine with clarity what kind of training events SMEs would prefer. What is clear, similar to what the intermediaries proposed, is that **more than one day of training is simply not feasible for most SMEs**. All opted in equal proportion for either half-day or one full-day session. Regarding format, there was no clear conclusion but it was suggested that the **format of training sessions should be adopted to fit objectives and target groups**. In some countries, responses to questionnaires indicated that **there exists a considerable interest in online training**.

In conclusion, SMEs consider IP as an important tool to reinforce economic and innovation strategies, and it may well have an impact on the economic growth of companies. IP usage will keep companies in a high level of competition and it is used as a complementary tool for innovation strategies.

Summary of Recommendations

1a. identified needs – for intermediaries

Of the three subjects of the study, intermediaries seem to be the group which will require less training. IP knowledge or, at least, awareness is high. They are aware of large number of methods and tools. However, it is not to be discounted that they could receive training on

how to train others. Refresher courses could also be desirable. They may also benefit from training or information sessions on why IP is so important, to be in a better position to train and advise SMEs.

1b. Identified needs – TTOs and Researchers

There are important organisational culture barriers with this target group, such as the emphasis on the need to publish and an unstable / unavailable IP budget. The integration of IP tools into curricula is an important step to improving the use of IP tools by future researchers. There is an indisputable case for integrating IP as an R&D output and increasing the valuation of IP for academic promotion.

1c. Identified needs – SMEs

An IP strategy of a typical SME is directly related to the brand image of the enterprise or to its business strategy. If the IP strategy of the SMEs is mostly based on advertising IP as an economic asset or reputation, it is simple to identify training needs in these fields and design appropriate sessions. On the other hand, if they do not see the economic potential of IP, then basic IPR training is desirable. Following this, it was possible to identify specific areas where training is necessary for SMEs:

- instruments / mechanisms of basic IP protection and enforcement,
- instruments / mechanisms to avoid IP violation, such as the importance of technology watch or surveillance and examples of good practice,
- and strategic use of IP and commercialisation techniques.

As it is clear that the main problems for SMEs are time and money, then an effort to show how IP can be a profit-making exercise is important. They also need to be shown that other, less costly and less complex IP instruments exist whose procedures are not so complicated. Both SMEs and intermediaries considered that is very important that the value of company assets are improved, as well as the company's reputation through IP. Simple examples on how to use IPRs and patent information in a comprehensive way for business would be useful, ranging from trade names and domains to simple examples of protecting strategies.

2a. Recommendations for Training Sessions – Intermediaries

As intermediaries usually act as advisors, their role should be *train the trainers*. They will pass on knowledge in such a way that it can be re-used and re-applied at “first-level” guidance stages. IP issues should be embedded into more standard business packages and normal business planning, so that SMEs can appreciate the value of IP in resolving business problems and contributing to the “bottom line”.

A further, more ambitious objective could be to train information specialists to use and interpret patent information and offer their advice to SMEs as consultants. IPRs and the use of patent information should be taught to be a commercialisation investment, and a tool for R&D and networking.

Fundamental and central to all of the above, is the message that IP should be seen broadly as an essential part of the business process, not an “add-on”.

2b. Recommendations for Researchers and TTOs

It is evident that this target group has extensive training needs. However, as previously mentioned, a change to organisation culture and more emphasis on IP as part of an integrated curricula is desirable.

Higher education institutions should also place more emphasis on IP generation as an indicator of academic / research excellence.

2c. Recommendations for SMEs

Training of this target group needs to be at the most basic level, and appeal to a wider objective, such as business development or competitiveness. The more complicated issues of IP in companies tend to be handed over to attorneys. The person(s) responsible for IP issues in most SMEs is in need of an extension to their IP knowledge, as well as being the catalyst to improve the IP knowledge of their colleagues as well. Therefore, training should be at a reasonable and justifiable level; it should be more business-oriented, whilst still treating important legal subjects in hand.

Training courses for SMEs should not just be regarding patents, but should cover a wider range of IP issues (procedures, costs, funding non-formal protection measures, etc). Trainings should also be a maximum of one-day duration and intensive. They should have a highly practical element wherever possible, including case studies and examples. Half-day sessions can be complemented with other resources such as leaflets, booklets or even e-learning materials. Trainers should be armed with a wealth of practical information, such as how much filing a patent costs in real terms, where to go for more information, etc.

Who we are

European Patent Office
Hungarian Patent Office
Portuguese Patent and Trademark Office
Finnish National Board of Patents and Registration
Spanish Patent and Trademark Office
INPI - Institut National de la Propriété Industrielle
State Intellectual Property Office of Croatia
Turkish Patent Institute
Danish Patent and Trademark Office
European Business and Innovation Centres Network
FUNDITEC - Foundation for development and technological innovation
IWT - Institute for the Promotion of Innovation by Science and Technology in Flanders
Fraunhofer Gesellschaft
Institut Européen Entreprise et Propriété Intellectuelle
METU Technopolis
Fundación EOI
Universidad Politécnica de Madrid
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