IPR support services for SMEs – Dos, don'ts and caveats as observed from a series of studies and consulting assignments in various countries

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Agenda

- This presentation covers aspects to consider when support services in the field of IPR are designed for SMEs
- The presentation has two main parts
 - A discussion of the specific of SMEs and their IPR usage, which leads to some conclusion on what should be offered to SMEs in terms of content
 - A discussion of some main success factors when designing support services (the "how" to provide support)

A number sources were used for the presentation (I)

- 1. "Benchmarking National and Regional Support Services in the Field of Industrial and Intellectual Property", commissioned by EC, DG Enterprise and Industry (PRO Inno paper no. 4) (Radauer et al. 2007) [most important source]
- 2. "Support Services in the Field of IPR for SMEs in Switzerland A Review", commissioned by the Swiss Federal Institute of Intellectual Property (Radauer & Streicher 2008)
- 3. "On the growing significance of IPR for German SMEs and the diminishing importance of physical assets", commissioned by the German Federal Ministry of Economics and Technology (Blind, Cuntz, Köhler & Radauer (2008))
- 4. "Supporting the improvement of existing and development of new IPR support services for Swiss SMEs", on behalf of Swiss Federal Institute of Intellectual Property (Radauer 2009)
- 5. "CASIP SMEs: On existing and potentially new support in the field of IPR for SMEs in Kazakhstan, Tajikistan, Uzbekistan and the Kyrgyz Republic" (Radauer & Kushner 2012)
- 6. ...plus a number of works not in the public domain, e.g. most recently in Serbia and Cameroon

A number sources were used for the presentation (II)

- Studies dealt, to different degrees, with mapping all existing IP support services, assessing service performance and deriving recommendations on how to improve them.
- Coverage: EU-27, Serbia, USA, Japan, Canada, Australia, Switzerland, Germany, Central Asia, Cameroon,
- Patent information services (including PATLIBs but also one time also a TISC) formed many times significant parts of the analysed service portfolios.

IPR AND SMES

Use of IPR by SMEs (I)

- Generally, in practically every country of the world, SMEs may make up 90% to 99% of the stock of firms.
- They are particularly important for (indigenous) economic welfare and innovation.
- There is usually an assumption that SMEs are disadvantaged compared to large firms in terms of resources.
- Therefore, there is a baseline assumption that special support is needed for SMEs.
- This issue of 'market failure', the only instance where according to market economists there is a reason for policy to intervene, needs to be discussed for every field and problem topic

Use of IPR by SMEs (II)

- No data generally available usually on patent and IP filings according to company size.
- Therefore, this problem is addressed by executing studies and surveys.
- General findings of most studies: SMEs make little use of the IPR-System!
 - *Exceptions: selected high-tech sectors*
 - European Patent Office (EPO) estimates: 25% of the patent applications stem from SMEs.

Reasons for the limited use of the existing IPR-System (I)

- Lack of Awareness
 - Insufficient knowledge about the (possible) impact of Intellectual Property Rights and the patenting on a company's overall business strategy
- Charges and Fees
 - Patent office fees (application and registration fee, publication fees)
 - Costs for legal advice; translation costs
 - Overall costs for obtaining a European patent protection: approx. € 40.000,- (Source: Roland Berger)
 - In addition: Costs arise before the product/service is on the market and/or the patent owner receives any revenues

Reasons for the limited use of the existing IPR-System (II)

- (Perceived?) enforceability of patent rights
 - How to handle and avoid patent infringements
 - Lack of financial resources
- Long lead times
 - Increased applications to national and international patent offices are producing a growing backlog
- (Perceived?) practice of granting patents
 - The share patents granted to SMEs (in terms of the number of applications) is generally lower, if compared to larger companies
 - Possible Reasons:
 - → Better reputation of large companies? OR
 - → Better IPR management in large companies?

Some picky observations regarding SMEs and IPR (service) usage <u>not only</u> in catching up economies

- There is no "the" SME
 - → very heterogeneous population from sole retailer across the street to high-tech life science firm
- Only few SMEs are into patenting
 - → In many instances SMEs making use of IPR services had more problems with trademarks, copyrights
 - → IP management needs to be considered
- \rightarrow Language is an issue.
 - → SMEs need to understand in their words what IP is and how they are affected by it (or could benefit through it)
- → Resource problems create situations where day-to-day management easily turns into crisis management.
 - → Nobody is waiting for the IP service provider, unless there is a real acute problem
 - \rightarrow Need to adapt

In catching up economies, the problems multiply...(I)

- There is a plethora of topics that are of higher importance than IPR
 - Examples: how to deal with electricity outages, how to deal with transport on bad roads, how to deal with access to suppliers, ...
- Innovations are mostly of an incremental character, often adaptations of already existing solutions to local markets (although the SME/ inventor might not be aware of this)
- Innovation may be lacking all together
- IPR may not be relevant in the business environment
 - No competitor is using it, and international patent/IP protection from outside countries may not be validated in the country the SME is residing in.
- Costs of international (patent) protection may be prohibitive (and the main problem remains to find a trading partner abroad)
- Enforcement might be even more difficult than in developed countries

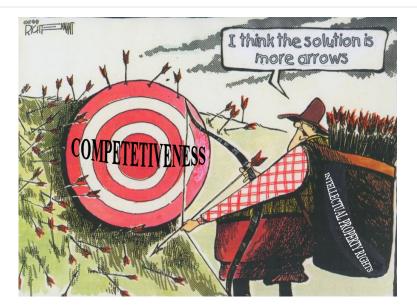
In catching up economies, the problems multiply...(II)

- → Awareness of SMEs on IPR may be even lower
- → Potential demand profile for IPR is different
 - → More focussed on trademarks, less on patents
 - → More training on how to transfer (freely available) technology to local markets
 - → Focus on different industries (such as agro-food sector) may also lean to different types of IP-related issues to become important (GIs)
- → Despite of all this, the observation is that in all countries there is a small nucleus of firms and researchers who have inventions and ideas of great promise across the world or at the very least regionally
 - → Example: Best HIV drug to date developed in Czech Republic
 - Need to identify these "gold nuggets" and find ways of how to best support them

The case of IP management

- Of all the barriers described before, lack of awareness may be the most important one in most instances.
- Lack of awareness translates into not knowing how to manage the topic of IP, i.e. how and when to decide which IP instrument to use
- In terms of patenting, for example, benefits and disadvantages have to be contrasted
 - Benefits: insurance against unlawful copying, reputation building for investors, direct income generation through licensing, strategic use, etc.
 - Disadvantages: Maximum time of protection of 20 years, making the blueprints available to (unlawful) competitors, costs
 - There are SMEs that still use patents to great effect
 - There are SMEs that successfully use (good enough) alternatives to patents (informal strategies such as trade secrets, counting on lead time, trademark protection, utility model protection in some countries, etc.)

IPR as a means to increase competitiveness?



- → It is more important to teach the SMEs how to make effective use of <u>all</u> instruments of the IP system in the context of the specific industry and company situation rather than to push for a higher usage of single IP instruments such as patents
- \rightarrow Important to teach <u>IP management skills</u>

SMES AND IPR SUPPORT SERVICES

How to design IPR support services (I)

- We conclude form the slides before that good SME support services, in terms of what they offer,...
 - ...tend to focus on the topic f IP management
 - ...they therefore cater for the full spectrum of IP instruments and not just, for example, patents
 - ...they take account of the SME-specific issues, such as the language issue
 - ..they understand to treat SMEs not as a uniform customer, but try to be as tailored as possible to specific firms in specific markets and countries that have different demands/needs in terms of IP

How to design IPR support services (II)

- In this section, we look at some important factors to consider in terms of <u>how</u> to design and offer services
 - The need to clearly define goals and explain the rationale of the service
 - The need to have performance measurement (evaluations) in place
 - The need for qualified staff delivering the service
 - The need to understand the systemic set-up in a specific country to successfully reach out to SMEs via collaboration with key actors close to SMEs

The market failure argument (I) – the need for clear-cut goals

→ The market failure argument implies that state intervention (*"using tax payers money"*) should only happen if there are instances of market failure

 \rightarrow Consequences

- If state intervention is enacted without a market failure present, there will be distortion effects ("favouring certain groups of people", unfair competition) and displacement effects (of private companies)

- If state intervention is successful and alleviates the market failure, then there is no need for the intervention any more and the <u>intervention</u> <u>should be ceased (!!!)</u>

→ There should be a clear reasoning why a certain type of service is needed.

The market failure argument (II) – the need for clear-cut goals

- Justification, for example with respect to SME support:
 - "SMEs do not patent enough" (really?)
 - "SMEs are not aware enough of IPR issues" (in what way?)
 - *"SMEs do not use patent information sufficiently"* (do they need to?)
 - *"The market of service providers does not cover SME information needs regarding patent information"* (and why should it be you who could/should do this? And also in the proposed way?)
- → Should be backed-up by data/evidence.
- → Should lead to a sound and clear-cut goal system, with logical links leading from a global mission statement over sub-goals to intended activities and outcomes.

The need for performance measurement and evaluations (I)

- Performance measurement, performance contracts and quality control
 - It is hard to argue the need for a service and, later on, its success/failure if there is no data to support the case
 → Needs to be thought of already in the planning process
 - Definition of sensible variables, against which success of the services is measured and <u>which take account of the market failure</u> targeted.
- → Monitor the evolution of this data regularly.
- → Evaluate the offerings after some time

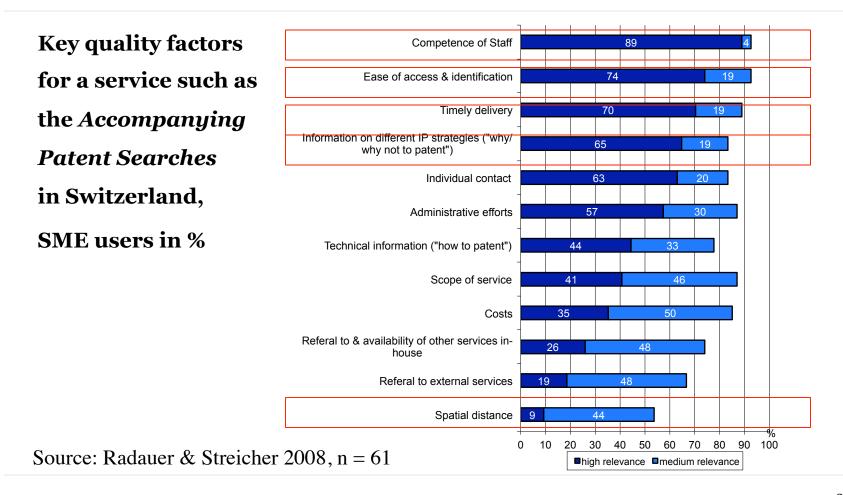
The need for performance measurement and evaluations (II)

- The reality is different
 - 5 out of 10 surveyed IP services in our EU benchmarking study from 2007 had no evaluations conducted
 - It was extremely hard to find services that could provide contact databases with around 50 SME users
- → If you do not know your customers, how do you make sure that you are doing what they need?
- → How are you going to explain yourself to the funding body?

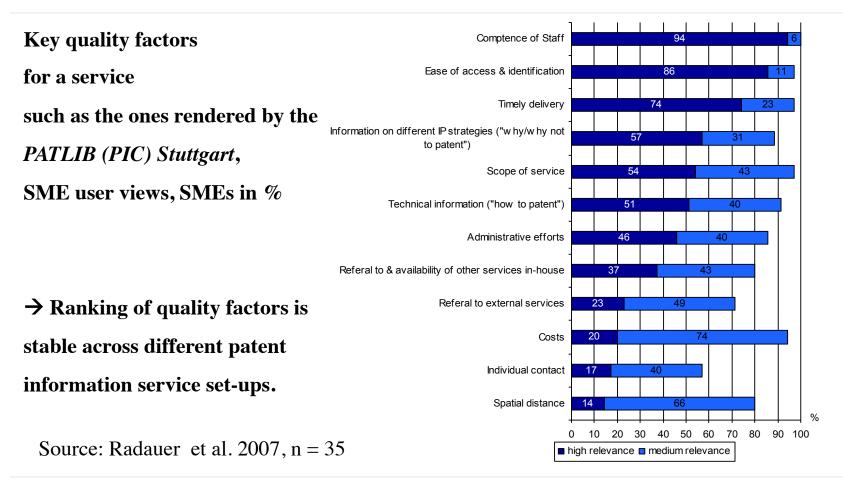
The focus on qualified staff providing the services (I)

- In some of our studies, we performed a survey where we also asked the users of IPR support services which were the most important key quality factors for the type of service they have used.
- This provided a means to compare different types of IPR support services.
- Surprisingly, the pattern of key quality factors was stable across practically all different types of IPR support services...

The focus on qualified staff providing the services (II)



The focus on qualified staff providing the services (III)



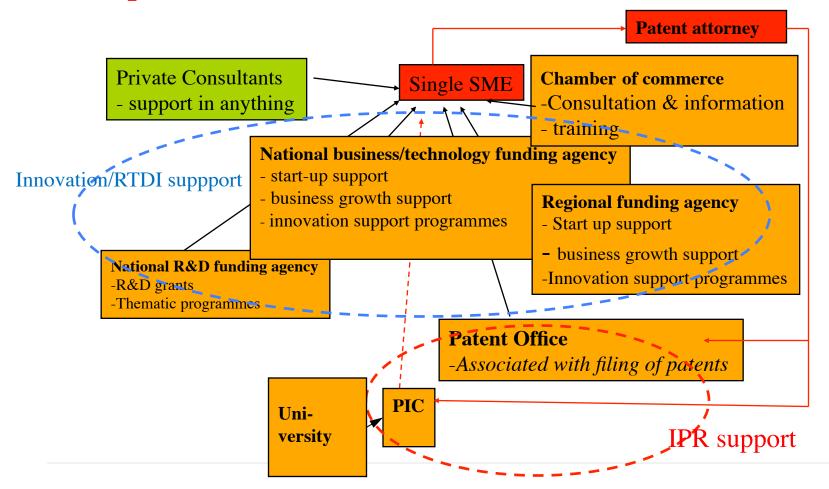
The focus on qualified staff providing the services (IV)

- Competence of staff is the most important key quality factor.
 - Due to the fact that IPR is in general a complicated matter.
 - Has to be seen in connection with the information needs, where the "why" to patent is more important than the technical information (e.g., the "how").
 - → Clear demand for information that extends beyond genuine patent information
 - → This requires, in addition to technical know-how, ideally some legal know-how, but especially business know-how, perhaps also focussed on particular industries.

Institutional set-ups (I): General information

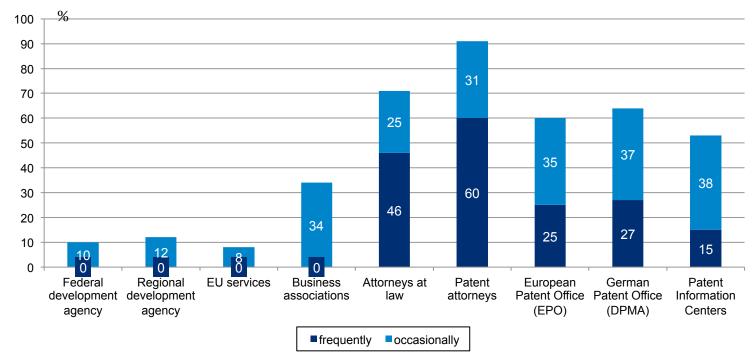
- The next slide shows a typical set-up with which a patent information centre/PATLIB is confronted in Europe
- Generally, there are many actors trying to help SMEs
 - Those most close to the SMEs are in the blue circle and comprise the actors that provide general support in innovation matters: funding agencies, chambers of commerce, etc.
 - The closeness is due to direct business contacts and/or to the possibilities to give the SMEs subsidies
 - Private business consultants are also close
 - The red-circled institutions are public IPR support service providers. They are not recognised SME service providers and have a hard time making themselves visible to SMEs,
 - Access to the IPR support service world usually happens in Europe via patent attorneys

Instutional set-ups (II): A frequently found institutional set-up for a PATLIB



Institutional set-ups (III): Usage of different service providers

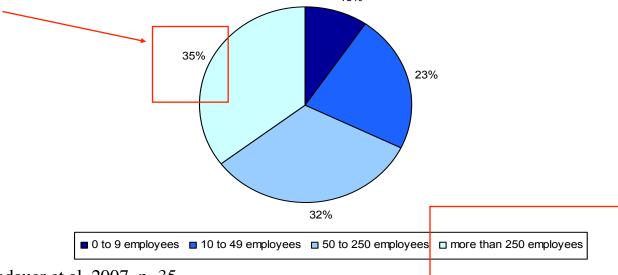
Usage frequency of different types of service providers, firms in %



Source: Blind, Cuntz, Köhler & Radauer, 2008, n = 295

Institutional set-ups (IV): SMEs may not be the core customer group for many PATLIBs in Europe

Company size distribution in interview sample [PIC Stuttgart, 2005 figures]



Source: Radauer et al. 2007, n=35

 \rightarrow ,,True" user distribution even more skewed towards non-SMEs

 \rightarrow important customer groups: large firms, patent attorneys

 \rightarrow Hall et. al (2003): Patent attorneys ferquently conduct searches on behalf of the SMEs.

→Hall et al. (2003): "Patent attorneys may present…a professional barrier rather than an enabling function"

Institutional set-ups (V): The situation in catching up economies

- In catching up economies, we may still see the distance between the IPR service providers and the SMEs as described before, but the situation can be even worse
 - Patent attorneys work primarily for foreign firms on enforcement issues
 - Many regular business support services do not exist or perform poorly (in the blue circle)
 - The overall institutional awareness of actors in policy on IPR is much reduced
 - In some smaller countries, the number of people with IP awareness may fit into one room
 - Consequence: Long response times when questions are forwarded, incoherent treatment of IP across institutions, etc.

 \rightarrow Still, selected collaboration with and education of those organisations close to SMEs may be the best option to reach out to small firms



Conclusions

- Some important criteria making up successful IPR support services for SMEs, particularly PATLIB-like services:
 - Ability to understand individual SME needs, covering all types of IP instruments
 - Clear reasoning for existence for service packages (market failure argument)
 - Sound target system
 - Evaluations and quality control structures
 - Working cooperation structures with stakeholders
 - Competence of staff
 - Value-added search services, covering information needs beyond technical patent information
 - Ease of identification
 - Timely delivery

Thank you

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