

**EAGLES Workshop on Intellectual Property Rights, Manila 2008****Introduction**

In many ways the role of IPR is often misunderstood by politicians and lay people in the public debate. It is straight forward to conclude that IPR is about forfeiting the rights for the rich investors and exempting the poor from access to the use of knowledge. This picture is far from correct. Another issue which is often misunderstood is that IPR is about earning money from ideas. Of course there may be some revenue generated by exercising IPR but to a large extent it is a question of the management of new knowledge making sure that it is being used to the limit of its potential. Maybe a better expression than IPR would be Intellectual Resource Management (IRM).

In the West the use of IPR is to a large extent an example of how society has been able to encourage innovation and share of knowledge by a very developed and regulated system of patents, trademarks and licenses. The demands for getting a patent is that the innovation has to be novel, it needs to be non obvious with a certain level of innovation and it has to be practical applicable. Natural laws and ideas cannot be patented. There are of course a lot of details on how to file a patent and what a patent imply. The important is that the innovator has to describe his innovation in detail and for this information he/she is granted a period of time, normally 20 years where he/she is granted some exclusive rights for the commercial exploitation of the innovation.

If we did not have a patent system innovators would in general have no interest in sharing important details about their innovations with others and in many cases there would be no incentive for investors to develop the application of the innovation. A good example is new medicine which has to go through a very expensive approval process before it can be sold on the market. No industry could afford to spend more than a billion euro which I needed for this process if there is no period of exclusive rights connected with the innovation.

In the developing world there has been less focus on IPR and there is a lack of institutions which can help developing and implementing IPR. Research and innovation is an important part of a country's economic growth and development, and many developing countries have realized that even if they are poor it is important to invest in research and development. A good example



on this is Rwanda (other examples) which has/have decided to invest massively in science and technology as a tool for economic growth. A proper legal and institutional investment in IPR has to follow. Countries with bad IPR regulations and underdeveloped or weak legal institutions, poor legal governance and enforcement, are severely disadvantaged.

This is why there is a need for better understanding and better communication of the advantages of good IPR regulation.

We recommend the following:

1. That information about research products emerging from EU-funded research be easily accessible
 - so that their benefits can be realized
 - classified, characterized as to usefulness
 - co-funded
 - searchable
 - contact point
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2. That relevant capacity for technology transfer be strengthened. Examples of relevant capacity could be the following: technology transfer facilities, staff training, for
 - Technology providers
 - Technology recipients
 - Technology facilitators, including providing a list of recommended resource persons
3. That relevant capacity for technology absorption be strengthened.
 - Funding
 - Collaboration
 - Technical capacity



4. That relevant capacity for product development and delivery be strengthened.
 - Handling regulatory system
 - Product stewardship
 - Risk assessment and management
 - A system to encourage further and sustainable transfers

5. That the EC commissioner consider a review of the following policy areas to facilitate the success of this recommendation
 - FP “optimal use” clarification
 - Encourage working with developing countries
 - Encourage the establishment of project governance mechanisms to facilitate access to research products for developing countries (IP handling in large EU projects)
 - Development Commission and Research Commission aligned better
 - System should be flexible

6. To improve the likelihood that useful products for developing countries could be derived from European research products, we believe that the following critical elements be considered in the access and transfer:
 - Upfront commercialization rights
 - Access to any relevant regulatory data
 - Provision of physical materials as needed
 - Defined delivery pathway, including go/no-go decision points
 - Indicators for measuring progress

7. Metrics for EC
 - Does this lead to increased funding for developing countries?
 - Number of transfers
 - Indicators for compliance by recipients of funding to points above



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Technology providers and technology recipients need similar capacities, although providers generally have access to more human resources and expertise dedicated to facilitating technology transfer than do recipients. The basic capacities needed for effective technology transfer include: 1) An understanding of the technology needed to create and use research products; 2) An understanding of each organization's policies, goals and priorities; 3) Access to timely legal expertise and knowledge of when it is appropriate to consult with legal counsel and what questions need to be asked; and 4) Expertise in negotiating agreements, including knowledge of what provisions must be included in agreements, what provisions should NOT be included and what is negotiable.

In order to strengthen the capacities of technology recipients in each of the above areas, training opportunities should be provided to designated personnel. Ideally, each recipient institution should identify specific individuals who have clear authority to negotiate on behalf of the institution. These key personnel should also have access to recommended technology transfer and legal experts who both understand the recipient institution's policies and priorities and have experience in the management of similar technology transfer agreements. Because there is always some distrust between research partners whenever technology transfer capacities and resources are unequal, it is important to provide opportunities for dialog between technology providers and recipients in order to build trust. This could be accomplished by seeking fora for networking opportunities or by developing pilot projects for research collaborations.



Finally, it is important for technology recipients to think of themselves also as providers of improved technologies that might have value for the original technology provider. This both increases the potential impact of any resulting research products and provides additional incentives for the technology provider to enter into research collaborations.

Metrics for EC

The importance of having a suitable framework in place to assess and measure technology transfer in EC-funded projects should not be underestimated. Metrics can create critical incentives necessary to increase developing countries' access to technologies arising from EC sponsorship; they are valuable instruments in promoting more effective commercialization and delivery strategies among partners; and they are important to the sponsor as a means of measuring the compliance of grantees to funding guidelines and obligations, as well as documenting the global impact of technologies arising from EC funding.

Create Incentives for Making Technologies Accessible

The commercialization process of technologies arising from sponsorship is often internally documented in terms of licensing details, revenue/royalties received, etc. But newly implemented metrics are needed to demonstrate the extent to which technologies are made accessible to developing countries, and are commercialized for developing country markets. Requirements to report these indicators to the sponsor will create a valuable incentive system. As an example, consider a patented gene conferring drought tolerance which has market value in certain developed country crops, but also has potential value for increasing food security in developing countries. Where there is a potential for the technology to provide both developed country commercial profits as well as to contribute to poverty alleviation, an investment may be needed to craft terms for differential access to intellectual property rights in developed and developing countries, and to engage developing country institutions in the commercialization process. Grantees are unlikely to allocate resources to these activities unless there are metrics and reporting mechanisms in place that provide recognition of their efforts.

**Support the Technology Commercialization Process**

Beyond creating incentives, metrics can be valuable tools for many parties in the commercialization process. They can be used to assess, for example, whether all elements required to deliver the technology are in place, or the degree to which progress is being made along the chosen pathway for delivery. Metrics can provide key information that supports a better understanding of institutional, or even national, capacities and can be useful in increasing the effectiveness of partnerships and consortia. A well-designed metrics framework can be particularly important in supporting better commercialization strategies for developing countries, including important risk mitigation choices, and ultimately can increase the likelihood of broad accessibility to technologies arising from EC funding.

Provide Critical Information for the Sponsor

Metrics can provide critical information indicating compliance to sponsors' guidelines and obligations that promote developing country access to technologies. A good monitoring and evaluation system provides a framework for learning over time. Metrics can illustrate gaps in capacity, provide an indication of prudent choices for future funding, and ultimately allow the sponsor to be increasingly effective in implementing goals for global accessibility to technologies arising from EC-funding. Finally, a framework of metrics measuring commercialization of technologies for developing countries can be used to illustrate the economic impact of EC funding in on the world's poor and underserved.

Relevant capacity for technology absorption should be strengthened

For the successful transfer of technologies and knowledge from European Union funded research projects it is not only important to have the appropriate mechanism and expertise in the European Union to affect optimal transfer of the research outputs, but it is also paramount that a corresponding expert network exists in developing countries and / or at partner organisations that will receive and handle such technologies and knowledge for the development of products for humanitarian purposes. It is therefore essential that the European Union supports such relevant organisations and structures in developing countries and partner organisations. In particular, three areas are of importance to strengthen such organisations and technology / knowledge transfer. Firstly, appropriate and long term funding is an essential component in



order to build, develop and maintain organisations handling the technology transfer, so that staff can be trained and retained throughout the complete development process of products. Secondly, the establishment of networks and communication channels between source organisations and receiving organisations will enable the transfer of technologies and knowledge from the European Union to developing countries. Thirdly, strengthening of the technical capability in the receiving organisations will support the successful transfer and development of products for the benefit of the developing world.

In summary, helping to build and maintain appropriate structures in developing world organisations will greatly help the absorption of European Union knowledge and technologies for humanitarian purposes.

That the EC commissioner considers a review of the following policy areas to facilitate the success of this recommendation

- FP “optimal use” clarification
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Eagles advises the EC commissioner to consider a review of its contracts under the various research programmes to stimulate European research institutions to make patented research outputs available for development. This would align the investments of DG Research in the European Research Area with the policies and objectives of DG Development.



Such review could lead to the inclusion of an "optimal use clarification" in research contracts which stimulate European research institutions to design strategies to use or transfer technologies for development purposes.

Such clarification could encompass an explicit declaration by the grantee to use the research output in their own research for development programmes. Such policy by the EC will stimulate not only the transfer of technology, but also the collaboration of European research organizations with partners in the South.

Alternatively (or in addition) the grantees could declare to actively promote the transfer of patented technologies to public or private organizations working towards poverty reduction and food security under a humanitarian use license. The EC could develop a limited number of standard clauses as examples for research institutions to choose from, depending on the specific types of technology and recipient partners.

Such principles may have to be agreed upon by the consortium partners of each research project and included in the IP handling sections of their agreement in order to avoid conflict or undue delays later.

Such strategies in EC-funded research will significantly contribute to the body of knowledge of how to most effectively make use of research output for poverty reduction and food security, which would be an important additional output of the European investments in research.