



# Supporting innovation



## An interview with Prof. Knut Blind

Professor Knut Blind, a European academician specializing in standardization, says research shows that standards support innovation and competition, but some stakeholders still need to be convinced. Since May 2008, Professor Blind has held the Endowed Chair in Standardization at the Rotterdam School of Management. He is also Professor for Innovation Economics and simultaneously head of the Competence Centre Regulation and Innovation of the Fraunhofer Institute ISI, both located at the Technical University of Berlin. Dr. Blind has published a book entitled *Software Patents: Economic Impacts And Policy Implications (New Horizons in Intellectual Property)*. He is also author or co-author of many monographs and articles in peer-reviewed journals, and still manages to find time to write occasional blog entries ([talkstandards.com](http://talkstandards.com)). Dr. Blind's fields of research include: standardization and technical change, intellectual property rights, innovations in the service sector, technology foresight (Delphi method, scenario analysis, science and technology indicators). Dr. Blind was interviewed for ISO Focus+ by Sweden-based freelance journalist, Kevin Billingham.

**ISO Focus+:** Please describe the research you're working on now.

**Prof. Blind:** Our main focus is on innovation and standardization. I know that to some people this sounds like a contradiction, but if you look closely there is a very strong relationship between the two.

Innovation can be defined as the successful diffusion of new products into the marketplace and the truth is that standards are very useful in achieving that, especially in network industries like mobile telephony and other information technology (IT) industries.

In some cases there can be a conflict between innovation and standardization, but it would be incorrect to say that that is a general problem. The question is whether companies with very intensive innovation activities are engaged in standardization to complement their portfolio, or alternatively if companies that are weak in innovation are trying to compensate for this weakness through active involvement in the standardization processes.

Another aspect that we are investigating regards intellectual property rights (IPR), especially patents, and the IPR strategies of companies regarding standardization. Are they trying to move their IPRs into standards, or are they trying to avoid standards?

**ISO Focus+:** Are you able to say anything now about the findings you expect to publish from this research?

**Prof. Blind:** Preliminary results show a somewhat negative relationship; that is, companies that spend heavily on research and development are less inclined to engage in standardization activities, at least within formal standardization bodies.

A similar relationship appears in regard to patents. The more patents a company has in relationship to its number of employees, the less likely it will be to join standardization committees. However, they may still be inclined to join standardization activities as members of standardization consortia.

**ISO Focus+:** Do you have a theory about why this would be happening?

**Prof. Blind:** Our hypothesis is that the rules are more flexible when the company works in a consortium, so there is a certain reluctance to join the formal bodies individually.

**ISO Focus+:** Does this indicate to you that ISO and the national standards bodies need to change their rules?

**Prof. Blind:** I think there should certainly be a proactive discussion on that issue. Such a discussion has started, but it needs further effort, and it might lead to a modification of strategies.

In general terms, how does standardization contribute to innovation and economic growth?

your products abroad and the higher your growth rates will be.

**ISO Focus+:** But doesn't participation in standardization in some cases limit a company's ability to differentiate itself by defining areas where it is more competitive than others?

**Prof. Blind:** Sure. On the one hand, you have to have a sophisticated strategy. You can't just give away your unique knowl-

**ISO Focus+:** One of your areas of specialization is the information and communication technology (ICT) sector, which is arguably the most important driver for global economic growth. Why is standardization so important specifically for ICT?

**Prof. Blind:** Because growth in the ICT sector is highly dependent on the establishment of new markets and new industries and standards are crucial to establishing this framework within which the sector can expand.

Without mobile telephony standards, for example, we would never have seen the successful and fast growing mobile phone industry that we have today. Standards are a crucial element for any network industry, because each product in a network depends on interfacing with other products and infrastructure.

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*Standards are crucial for any network industry.*

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There are of course cases in ICT where a single company can set the standard, but companies like Microsoft or IBM are certainly the exception. Companies need common standards that are accessible for all. Without common standards, we would quickly get locked into old technologies. The ICT sector also challenges standards, because the rapid pace of innovation means that standards have to be adapted to new technological options.

**ISO Focus+:** What would be a concrete example of the connection between standards development and improved business opportunities and new markets?

**Prof. Blind:** The mobile phone industry in Europe is probably the best example. There was a more or less political decision back in the early 1990s to settle on GSM as the single European standard. This was the starting point for the enormous success of the industry in Europe, whereas the American market remained much more fragmented, with competing standards in different states and regions.

For nearly 20 years, European consumers have been able to travel anywhere on the continent and their phones simply work. American users didn't have the same level of freedom in the early years of mobile telephony.

Of course, an argument can also be made in favour of competition among standards. Over the long run, it's possi-



**ISO Focus+:** Prof. Blind: Standards clearly support the diffusion of new products into the marketplace, and that supports economic growth. If you just have ideas that don't get turned into new products, then there will be no economic benefit.

So on the one hand, this transfer channel mechanism is very important, and on the other hand companies have to become more competitive internationally. This can be achieved by the efficient implementation of standards, leading to higher productivity. The better your competitiveness, the more able you are to sell

edge and capabilities. But, on the other hand, very few companies are able to promote the development of entirely new markets by going it alone. They need the support of their competitors, suppliers and customers.

Standardization helps to shape the common framework conditions for such new markets. For example, first you generate a new platform standard and then, in the next step, you compete. These are strategic decisions; you have to think very carefully about what kind of know-how to transfer into standardization and what to keep for yourself.

ble that technical performance in the USA was made somewhat better by the competition between mobile standards. But as the market was being established, there's no doubt that European consumers faced a more comfortable situation.

**ISO Focus+:** *Are ISO and the other standards bodies doing a good enough job getting the word out to companies and organizations about the value of participating in standards development?*

**Prof. Blind:** ISO and the other international standards bodies, as well as the national organizations, are working hard to meet some tough challenges from new technological developments on one hand and from changing market requirements on the other.

One way they are addressing this is with new products like fast-track standards that can reach release status more quickly. This is certainly positive. But there is strong competition from other standards consortia, and sometimes they have better solutions. In general, it's still not easy to convince companies that they should participate in standardization and send people to the committees.

In the past, ISO and the various national standardization bodies have launched numerous studies to analyse and quantify the economic benefits of implementing standards and the benefits of getting involved in standards both for single companies, specific sectors or whole economies.

In summary, it's clearly worthwhile for most companies or whole economies to invest in standardization, but it's still not easy to convince CEOs, especially in small and medium-sized companies, about the value of engagement in standardization.

I think we're facing a big challenge with the number of knowledgeable people who are reaching retirement age. We have to find ways to make working in standardization attractive to a younger generation of experts. And there are many new members joining, especially from Asia, and they have to be integrated into the system.

So there are difficult tasks, but I believe the standards bodies are capable of dealing with them.

**ISO Focus+:** *Do you feel that it makes sense for each country to develop a national strategy for standardization?*

**Prof. Blind:** There is a trend toward more and more countries developing specific

## Benefits of participating in development of standards

According to Professor Blind, business and government can achieve the following benefits by participating in standards development:

### Active involvement in standardization helps companies:

- Meet requirements of customers and consumers
- Increase productivity and lower costs for setting contracts
- Shape the framework conditions for future markets
- Meet possible suppliers and customers in standardization processes
- Get in contact with knowledgeable research organizations
- Gain insight into future requirements by regulatory bodies, perhaps making some governmental regulations superfluous
- Increase the value of their own intellectual property rights by integrating them into standards.

### Standards help nations:

- Start new standardization activities in areas of national technological strengths, which may later be leveraged into European and international activities. This also helps in establishing a good starting position in developing global markets
- Involve small and medium-sized companies at the national level
- Take account of special national preferences for health, environment and safety in national standardization activities, for example by integrating consumer organizations, trade unions and environmental organizations
- Involve public procurers responsible for large segments of the demand side, for instance in ICT.

strategies for standardization. I am currently a member of an expert group looking at an international standards strategy for Europe over the next 10 years, to 2020.

*Standards clearly support the diffusion of new products.*

There is certainly some tension between the national and international strategies. But there are situations in which national characteristics require a national approach. We need to make sure that they complement rather than contradict each other, but an international strategy is not always sufficient at the national level.

We should keep in mind that standardization is an instrument not only to promote the international competitiveness of domestic industries, but also to reflect the national preferences of consumers for

health and safety. So there are good arguments in favour of national strategies. But they shouldn't contradict or hinder international or European activities.

**ISO Focus+:** *Which European countries do you feel are doing the best job of raising the value of standardization as a strategic issue?*

**Prof. Blind:** Germany, the United Kingdom and France certainly have very advanced approaches. Among smaller countries, The Netherlands is very sophisticated, perhaps even more advanced than the big countries in some areas. The Scandinavian countries are taking the issues seriously and contributing a great deal.

There are unfortunately some deficits in the southern parts of Europe and in the new accession countries. This needs to be addressed, because those countries need better standardization infrastructure if they are to become fully integrated with the rest of Europe. ■