

Europe INNOVA Thematic Workshop
"Lead Markets and Innovation"
June 29th and 30th, 2006, Munich, Germany

Executive Summary

The first Europe INNOVA Thematic Workshop explored the concept of lead markets, as proposed by the Aho Report. The workshop brought together Europe INNOVA partners with other key stakeholders and experts in the field and discussed the requirements for creating new market opportunities in Europe based on leading edge technologies.

The discussions during the two days of the workshop led to a number of ideas and policy recommendations that could be further exploited by the Europe INNOVA partners and the European Commission for policy formulation. During the two parallel sessions of the workshop, discussions took place on how to define and further develop the concept of lead markets to the specific fields of Space industry and Eco-innovation. The two specific areas have been selected due to their radical up scaling of technological and market importance.

A. Towards a better understanding of the “lead markets”

Lead markets are defined as new or emerging markets characterised by a wide adoption of state-of-the-art technologies and introduction of globally leading innovations; they lead the international diffusion of an innovation and set the global standards. Lead-markets are usually regional markets (most often countries), which utilize a certain innovation design earlier than other countries and which do have specific properties (lead market factors) which increase the probability that other countries will adopt to the same innovation design, too. Lead markets are usually characterised by high per-capita income, demanding and innovative consumers, high quality standards, and flexible, innovation-friendly framework conditions for producers and users.

Firms, governments and the favourable or not environment for the application of the specific innovations are the main actors influencing the potential development of a lead market. **Lead Markets cannot be "made" or created**, but their creation and development significantly depends on the national or local "settings", which in turn need to be designed (and implemented) in order to support innovation and market needs.

However, there was large scepticism on the term 'lead markets' by many workshop participants. The example of the Concorde technology (leading technology – extremely small market with small profit margins) highlights that past attempts to lead a market proved disastrous. State of the art technology could not solely establish a dominant global market. It is also an issue of economics and profit. A leading technology could never establish a lead market if it does not promise financial success. The term **"innovation friendly markets"**, was proposed as an alternative.

B. Lead Markets in Strategic Areas

Companies are the carriers of the lead market concept and those that promote and "implement" it. The development of lead markets is based on the **capacity of companies to internationalise their market activities**. But are there real chances for Europe to create new jobs and market opportunities building upon leading edge technologies? According to the participants, areas like eHealth, Pharmaceuticals, Energy, Environment, Security, Electronic Entertainment & Content and Transport and Logistics appear to be promising for Europe. Nevertheless, three important factors regarding the technology should be taken into account; the creation of high added value, the broad range of applications and the estimation of high profits and market share.

In both the cases of Space sector and Eco-innovation it seems that technologies are developed within structures and cultures focused around scientific or technological objectives and lack of information about consumer behaviour. Therefore, it critical to develop ideas on how we can turn the traditionally '*science push*' oriented support policies more towards '*need pull*' policies.

While foreseeing the development of future markets of space-related technologies is difficult, this is not the case for eco-innovation. The limited and reduced world resources are known and as a result markets for eco-innovation are gaining importance. However, it seems that experience from the past cannot provide with a lot of information for future estimations.

Despite the differences among the various sectors and fields it was widely accepted by the participants that the support of the creation and development of lead markets needs strong political commitment on European and Member State level, and common representation of interests on a global scale (e.g. with respect to regulations, environmental targets and agreements). The same applies even to highly time-consuming fields like for example Galileo. If it is to become a dominant technology for future world navigation markets, this would require a *strong political commitment* and regulatory support from Europe and its Member States.

C. From practical experience to policy recommendations¹

The following key points could be mentioned:

1. A successful innovation policy in the field calls for more than higher expenditure of R&D. It also requires improved **coordination among public authorities**. Although governments have only limited means for fostering market innovation, they significantly influence demand for advanced goods and services through shaping the business environment.

¹ According to the 'Aho' report, 'many elements for encouraging the development of lead markets are already in place, including relatively high incomes and a willingness to purchase higher quality goods. However, this is not enough - further steps need to be taken to':

- Provide a harmonised regulatory environment across the EU favourable to innovation and based on early anticipation of needs;
- Use standards-setting powers to demand high technical performance levels and reach agreement on new standards quickly and efficiently;
- Use public procurement to drive demand for innovative goods, while at the same time improving the level of public services; and
- Foster a cultural shift which celebrates innovation and a desire to possess innovative goods and experience innovative services, such that Europe develops as a natural home for innovators.

2. The **role of the public sector** is very specific; to satisfy the needs of the public. Procurement has to ensure that goods and services are best adapted to the obligations that the public sector has towards the people. In addition, purchasing has to be professional, outside political affect and done with the correct criteria. The risk of adopting leading technologies is quite big and potential failure would directly reflect in the life of the people.
3. Nevertheless, more **proactive public procurement** is required (for goods that do not yet exist) through New EU directives that create opportunities, complementary actions and structuring demand (in two ways; Aggregation or unbundling & training professionals to be intelligent customers) and criteria of most economically advantageous outcome in tender selection. In addition, it is important to keep the participation rules easy and clear for SMEs.
4. Opportunities need to be opened up more for innovative SMEs and **Human resources** need to be channelled towards the new knowledge. Norms, regulations and wider understanding of the lead market concept should modernize customers and providers, to “intelligent” ones, who will be aware of the potential new solutions, and would further support the evolution of the lead market by providing new opportunities to drive innovation for both public procurement and private investment.
5. **Regulation does matter.** If Member States would adopt regulations on the application of new technologies quicker, this would shorten the time-to-market in products. The creation of dominant markets for leading technologies is more linked to decisions on the content, collaboration and regulation than of providing subsidies. A harmonised regulatory environment serves and anticipates needs. The regulatory framework should be built in a way that when a new product is introduced, regulation clears the way, assists in creating new market places. “Diffusion” of environmental policies and regulations, for example, is one of the main success factors becoming a strong local market a Lead Market for eco-industry.
6. The idea of **financing “ambitious” projects** in leading technologies in strategic areas like eHealth, Pharmaceuticals, Energy, Environment, Security, Electronic

Entertainment & Content and Transport & Logistics, has been supported. However, mobilisation of equity financing like Venture Capital seems extremely weak.

7. A more concrete **standardisation policy** is needed. However, there are two things that need to be taken into consideration. Firstly, in Europe standards are not obligatory as they are not set by State Governments. Secondly, standards are usually developed by private companies and their broad acceptance is related to the power of the company imposing them. The “voluntary” standards (those imposed by companies) could be acceptable as a general practice but they could not assure the market creation.
8. A strong **IPR System** which protects “European interests” should be further developed. In both the space industry and eco-innovation IPR issues are difficult and complicated.
9. Critical mass of private initiatives takes places when the lead market is developed and established. Therefore, public **financial support** plays an important role during the “spreading phase” of a leading technology.
10. Finally, **Cluster policies** were considered particularly suitable instruments for developing lead markets in a holistic and interactive way.