IN-DEPTH ASSESSMENT OF THE SITUATION OF THE EUROPEAN FOOTWEAR SECTOR AND PROSPECTS FOR ITS FUTURE DEVELOPMENT

(CONTRACT NO ENTR/2010/16, LOT 2)

Task 6: Research, Development and Innovation in the Footwear Sector

Final Report

prepared for

DG Enterprise & Industry



EXECUTIVE SUMMARY

The Role of R&D in the Footwear Sector

Research, development and innovation (RDI) have a strategic importance for the competitiveness of EU Industry. From the point of view of a firm, innovation is the implementation of a new solution aimed at enhancing its competitive position, its performance, or its know-how.

Footwear manufacturing has benefited from both process and product innovations. These include innovations made to the production line that improve the efficiency and effectiveness of footwear production and that of complementary services. There has also been significant investment into the development of new materials, components and technologies especially in the fields of specialist footwear such orthopaedic, protective and sports footwear.

The aim of this report is to consider the importance of research and innovation for the footwear industry in three regions of the EU. The objectives were:

- to provide a retrospective analysis of what has taken place over the last 10-15 years;
- to identify best practices in transforming R&D outcomes into marketable products; and
- to assess future prospects for R&D in the footwear sector.

To investigate these aspects we carried out case-studies, involving interviews with individual companies and industry associations in three regions. These are described in Box 1.

Box 1: The Case-Study Regions

The main footwear clusters in **Lombardy** are Vigevano – just south of Milan - and Bassa Bresciana. Vigevano is a traditional cluster composed of footwear companies, component manufacturers and footwear machinery manufacturers. Research institutes, including CIMAC, the research institute of the Italian Footwear Association (ANCI), are also based in Vigevano. Bassa Bresciana is mainly a leather industry cluster. Not all industrial clusters in Lombardy have maintained their competitiveness, as the Vigevano district has been negatively impacted by the emergence of Eastern European and later Far-East Asian imports.

Southern Poland comprising the neighbouring regions of Silesia and Malopolska is the main footwear area of Poland. In Silesia, the industry is concentrated around the cities of Czestochow and, Myszków while in Malopolska, the key areas are Kalwaria Zebrzydowska and Podhale. The Institute of Leather Industry (ILI) (based in Krakow) provides research, training and consulting services for footwear and footwear components.

Portugal's main footwear-producing region is in **Norte**, focused around the city of Porto. It contains 96% of all Portuguese footwear companies and employs 98% of people working in the footwear industry. It hosts the Footwear Technology Centre of Portugal (CTCP) and the headquarters of the Portuguese Footwear, Components and Leather Goods Manufacturers' Association (APICCAPS).

Best Practices in Implementing R&D Outcomes

The importance of the research, development and innovation (RDI) was recognised as a key factor to sustainable and economic growth in each of three case study regions.

In all three case study regions, product-related developments (to develop new ones or to upgrade existing ones) were the main focus for footwear manufacturers, together with improved business models and marketing innovations.

Another important trend identified by some of the footwear companies interviewed was the acceleration of incorporating IT into footwear production. This includes the use of IT in the production process, to facilitate small production runs and to customise the products in a cost effective way, as well as in sales and logistics.

Footwear firms are also exploring different sales and marketing strategies and trying to approach international markets in a different ways, including internet sales, to maximise opportunities to sell their goods.

In Lombardy (Italy) and Norte (Portugal), RDI in the footwear sector was actively supported through collaborations amongst companies and other organisations.

In both regions, producers of shoe manufacturing machinery have focused on developing technological improvements that offer more flexibility to their customers in the process of shoe production and maintain high quality products. The close geographical proximity of machinery firms contributes to the spread of knowledge to footwear firms in each cluster. However, there is little direct information and knowledge exchange among the machine manufacturers in Lombardy.

In Norte, the research centre aims to bring together different organisations that can then work together on implementation. Its close relationships, not only with footwear companies but with the sectors that support them, including equipment manufacturers, enables it to do this. Companies in the region have also worked closely with their suppliers and customers to ensure that RDI meets the market needs of the industry.

In Southern Poland, there is a formal 'technology platform' for the leather industry which was established in 2006 to encourage technological development and cooperation between industry, institutes and academia with a focus on conducting research and implementation of the results. However, in practice, there appeared to be a very limited amount of partnering between companies and institutions with respect to RDI.

Conclusions

The key conclusions of the study are that:

- most companies have undertaken some form of research, development and innovation in all of the regions examined, delivering a wide range of different innovative outcomes. In most cases, responsibility for RDI remains in the EU, even where companies have relocated production to third countries. However, we did find one example of a company setting up an RDI facility in China;
- the innovation activity undertaken by companies depends to some extent on the type of shoes they manufacture. For example a safety footwear manufacturer will invest in RDI related to water repellent footwear or non-slip soles, etc. whilst fashion footwear companies have focused on measures to increase flexibility so that they can produce rapid, short run lines;
- some companies work very closely with research institutes, footwear associations and suppliers at regional, national and in some cases international EU level. This close collaboration results in the rapid uptake of research and innovation results by companies;
- technological innovations within the footwear industry are essentially incremental rather than major breakthroughs. They are often associated with factors such as increasingly short timescales, customisation and the provision of additional services. Organisational and structural innovation is also becoming more important;
- despite the innovation activity in the footwear industry, many of those interviewed agreed that more needs to be done to ensure the uptake of innovation by European footwear manufacturers, in order to assist the sector's long term competitiveness; and
- larger-scale and longer term projects are more difficult to finance and harder for companies (other than the largest players) to participate in. EU funding has helped to develop such projects, though stakeholders have found them difficult and time consuming to manage.

Recommendations

Based on the findings of this Task, we recommend that the following actions are considered:

- Reducing administrative burden on accessing funding: The European Commission, national and regional governments, research centres and industry associations should work together to provide better information for companies on available finance sources for RDI. Funding applications for RDI and access to government support programmes should be further simplified. The availability of funding needs to be promoted and marketed to footwear companies to increase awareness of different initiatives and programmes at the EU, regional and national level. There is also a need to foster a stronger alignment of funding and other support measures with the regional footwear needs, for example by including industry representatives in the selection process.
- Initiatives and support to enter new markets: The industry association in Portugal has been particularly successful in helping companies to export, for example by helping them to take advantage of EU funding to attend international trade fairs. This approach could be transferred to other countries and the EU could draw on the Portuguese experience to promote the assistance it provides.
- Increasing collaboration to access RDI know-how: RDI collaboration can help small footwear businesses to share resources and costly technology to improve their competitive position. Research outputs and technology can be offered to SMEs through collaborative work between the industry and the various research institutes. Research institutes need to place a particular focus on communication and collaboration with SMEs; approaches such as working with clusters and developing personal contacts could be explored further.
- Enhancing partnerships to reduce barriers to innovation: A strong partnership between industry and research centres is seen as vital to encouraging innovation. One way to address this would be the development of "Centres of Excellence" where research centres, practitioners, policy makers and university researchers come together to innovate and share resources. In order to attract SMEs' attention to these technology and innovation centres, tangible benefits should be offered in the short term as well as in the long term. At the same time industry participants need to give guidance and set the direction throughout research projects in order for the outcome to be relevant, applicable and successful.
- Innovation training: footwear companies, in particular SMEs, may not fully understand how current and emerging technologies and their applications are relevant to their business. One option to address this issue is to incorporate innovation into training programmes. This could include both a focus on innovation in formal training programmes and the operation of short courses for footwear company owners and managers, organised through industry associations and research centres. The European Commission could consider providing

funding for such training initiatives. Research centres, education institutes, as well as associations at the national and regional levels could also initiate programmes to train the trainers, so that the skills and knowledge of current employees could be enhanced.

- Help in marketing and branding: Branding, high quality and niche markets are ways of moving to higher value positions in the supply chain for footwear companies, and many of them are already taking such steps. Learning from the experience of successful companies could encourage others in the region to take similar steps. This could be achieved through 'best practice' seminars organised at regional and national levels, tailored to footwear company needs.
- Support for protection of innovations: many companies we spoke to considered that the process of protecting designs and innovations was too costly, too slow and too difficult to enforce. In the absence of reform of the EU patent system, industry associations, research centres, national and regional governments should examine ways to provide administrative and financial support for companies who want apply for footwear patents.
- Effective and easily accessible advice and support tools: the internet is becoming a popular tool for footwear firms looking to increase sales, undertake marketing or to simply communicate with their customers, although concerns remain over the high rate of returns of on-line sales. Industry associations and research institutes should work with SMEs in particular to develop their capability in ecommerce. Both SMEs and footwear related organisations emphasised the need for online support tools and digital media to access suppliers, agents, customers and generally to promote their brand and products. This would help companies in remote areas to get support when required, as well as making the most of collaboration opportunities to access knowledge and expertise Europe-wide.