

A-FOOTPRINT KICK-OFF MEETING

The A-FOOTPRINT kick-off meeting was held between 21st-23rd October 2009 at the offices of MATERIALISE in Leuven, Belgium. Twenty-four researchers met to discuss the project and set out work plans for the following 48 months.

The overall objective of the project is to develop novel ankle/foot and foot orthoses for common disabling conditions which are cost-effective, high-speed to market, and personalised for *form* and *function*. Disabling foot and ankle conditions affect approximately 200 million European citizens. Over €300M per annum is spent treating many of these people with orthoses and splints, often relying on hand-crafted manufacturing techniques which are slow, costly and difficult to reproduce. The A-FOOTPRINT approach will automate processes to speed up the manufacture, delivery and supply of personalised devices exploiting digital scanning, computer-aided design and rapid manufacturing. Novel devices will be developed which are cost-effective, yet personalised to provide better fit and comfort and functional performance. Rapid provision of better orthotic devices with excellent supporting technologies and services should result in quicker recovery times, reduced symptoms and improved functional ability thus increasing the quality of life for European citizens with disabling foot and ankle conditions. Working closely with multiple stakeholders the project will also develop flexible business models sensitive to different health care models across Europe.

Project summary

Organised as 9 integrating work packages the research will develop new patient information systems to enable more effective intelligent diagnostics and prescribing protocols for personalised orthoses. Computer-aided design software linked to biomechanical/gait optimisation routines will enable clinicians and technicians to design highly personalised orthoses. The capabilities of layer/additive manufacturing techniques will be developed to enable new innovative products to be developed. The research and technology developments within A-FOOTPRINT will be combined in a fully integrated system with the production of prototype devices demonstrated within a SME pilot factory. A-FOOTPRINT is a 4 year project funded under the 7th Framework Programme in the Nanotechnologies, Materials and New Production Technologies Cooperation Work Programme and has an overall budget of €3.72M.

Consortium partners

- Glasgow Caledonian University
- Baltic Orthoservice UAB
- University of Newcastle upon Tyne
- Materialise NV
- Peacocks Medical Group Ltd
- Firefly Orthoses Limited
- K.H. Kempen University College
- RSscan International
- AnyBody Technology A/S
- Maastricht University Medical Centre
- TNO
- Fontys University
- Junquera y Diz S.L