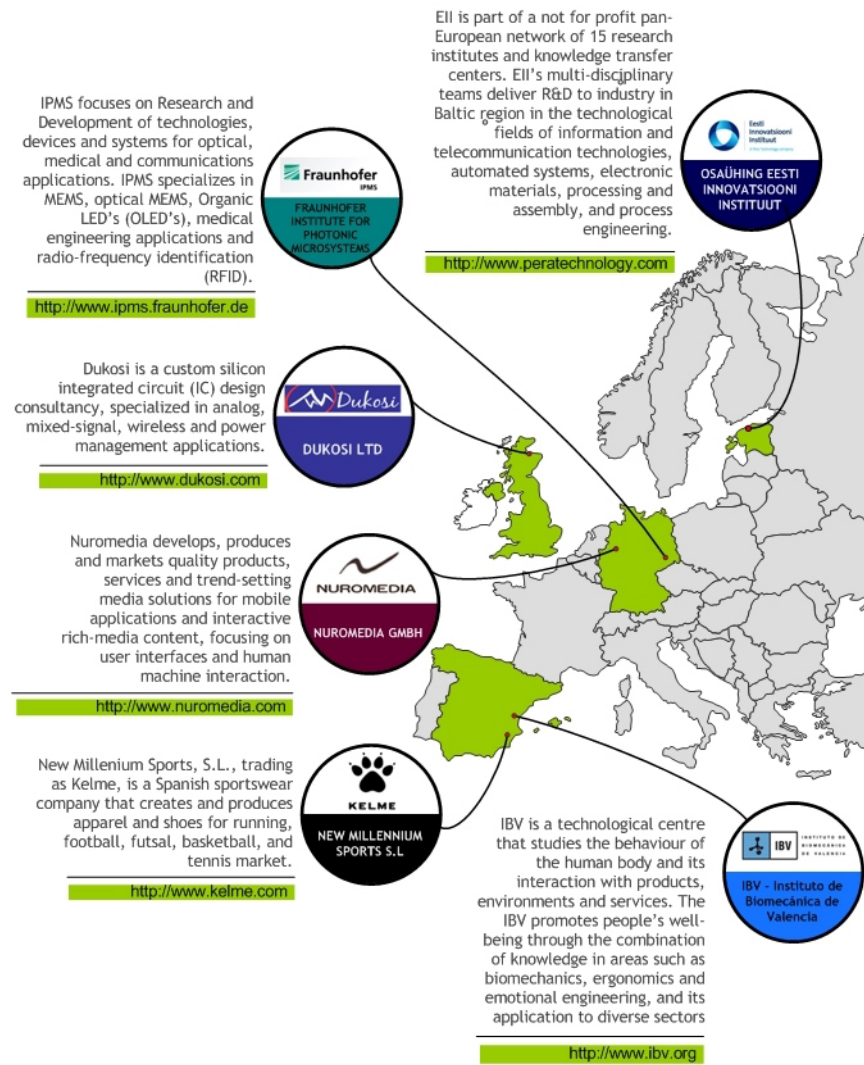


Consortium partners



Science and Technology Running Together

<http://www.runsafer.eu>



Founded by the European Commission

FP7-SME-2011-1
 Project: 285800

Research for SMEs



Running has become one of the most popular sports in the last years. Running yields clear and numerous benefits on health; however, it has also a high incidence of related injuries.

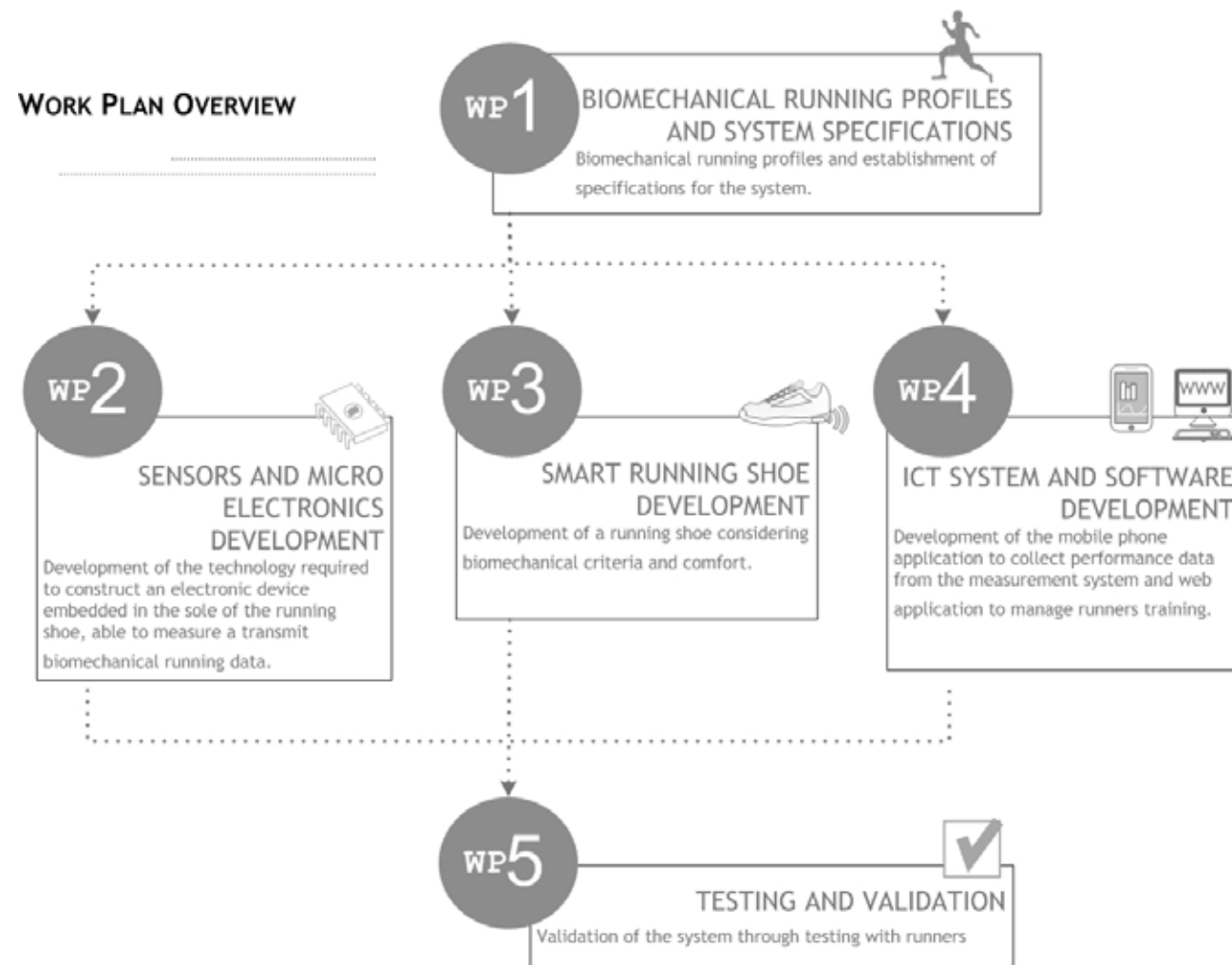
The general functionalities of the instrumented running shoe to be developed will be **biomechanically optimum, high autonomy, low weight, long life and resistance against the normal use of the shoe.**

The RUNSAFER Project ('Development of a new running shoe with embedded electronics providing real time biomechanical feedback to reduce injury risk and enhance motivation, and a web portal allowing real training management') has been founded by the European Commission through the VII Framework Programme in order to develop a new system consisting on:

- A new running shoe
- A mobile phone application
- A web portal

These tools will help to prevent injuries, providing control training to runners, based on the analysis of their running biomechanical pattern.

The RUNSAFER project consists of five technical workpackages, as showed below:



How it will work?



The running system will consist in a **microelectronic measurement system embedded on both shoes**, able to gather and transmit the main biomechanical parameters during running.

The information will be wireless transmitted to a **Micro SD card in the mobile phone** of the runner while running, where a freeware mobile phone application will inform in real time the runner about the **planned activity and performance achieved, suggesting modifications on the activity to change the running pattern in order to avoid running injuries.**

The mobile phone applications will have the possibility to integrate additional worthy information as heart rate or GPS positioning provided by other commercial devices.

After the running activity, the runner will be able to **download all the generated running information in a web portal**, where services to manage such training info will be available. This web portal will allow:

- The generation of training plans
- Recommendations and the follow up of the training improvements.
- Web 2.0. functionalities, allowing the user to be in contact with other runners worldwide.
- Built and share contents as running routes, footwear info, etc.