

Press release 'ORTHOSIM project'

ORTHOSIM: the European Simulation Service Provider (SSP) for Orthopaedic Surgery

Each year more than 600.000 knee, hip and spine surgical interventions requiring surgical implants are performed in Europe. A considerable amount of them are due to failures that could be prevented with a better preoperative analysis such as the one proposed by ORTHOSIM.

With this service, a surgeon or implant engineer can effectively call on the expertise of the best people in any field of orthopaedic surgery, where biomechanical simulation can offer new insights for patient care.



It targets three basic stakeholders in the health sector:

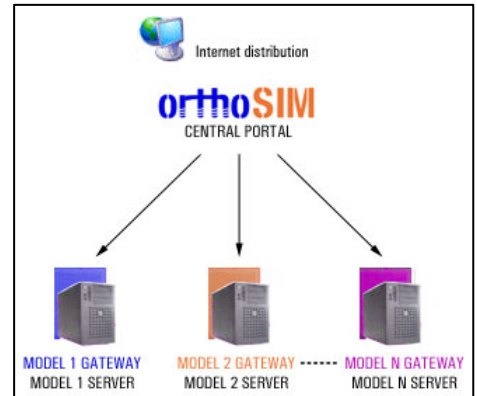
- It offers to **orthopaedic surgeons** scientifically validated models for clinical simulation of customized cases.
- It offers to **implant manufacturers** a tool to evaluate new product concepts without costly procedures.
- It offers to **students and researchers** a relevant and accessible tool for learning and investigating.

A user – a surgeon planning an operation, or an engineer working for an implant manufacturer – calls up the service website and orders a simulation service from among those models available. He or she enters the appropriate input data (information about the patient and the surgical technique proposed) in the user-friendly interface.

The SSP connects to a simulation-model server and initiates the simulation computation using a customised and validated model. Once the job is complete, the SSP uploads the resulting report to the portal and notifies the user. For the

surgeon, the output indicates whether the proposed technique and instrumentation are likely to be effective and suggests improvements if not. For the implant designer, the simulation replaces what would otherwise be a much more time-consuming laboratory experiment requiring preparation and testing of real implant models.

ADAPTING, a Spanish IT company coordinating the project, ENSAM Laboratoire de Biomécanique (SERAM), located in Paris, the Institute of Biomechanics of Valencia (IBV) and SURGIVIEW, a French corporation focused on clinical information systems are the beneficiaries of the project, with the participation of nine other members in several EU countries. The Consortium will carry out a market validation project of this innovative service in different countries, starting with Spain and France, and spreading into Germany, the Czech Republic and Poland. The project will last 18 months and started on 1 June 2005.



More information: <http://www.orthosim.com>