



MARVEST

MAKING VIRTUAL IMAGES USED IN NAVIGATIONAL TRAINING SIMULATORS MORE REALISTIC

The MARVEST project involved developing a new generation of physically realistic, interactive software and integrating all the soft- and hardware components into a 'situation room' for naval simulations.

MARVEST's aim was two-fold: to make visual and audio simulation more realistic and to exploit the technologies for the physical modelling of light in real time as a way of heightening the impression of total immersion.

Spinoffs and future developments

The project partners have developed innovative technologies which take account of how light and sound physically behave and how the eyes and ears respond to such stimulation, while incorporating real-time technologies used in training simulators.

In the course of the project, some of the partners' work focused on the ergonomics of the bridge in real-life situations and they produced training for day and night navigation: judging distance, identifying reflections and glare, visibility, weather conditions, environmental noise and studying critical situations - berthing and boarding.

To validate the realistic, real-time technologies developed, two working platforms were created: the first, entirely virtual one, was deployed at the premises of Optis, the company directing the project, and at CLARTE, project partner in Laval. The second platform was a simulator deployed at ECA Faros in Lannion.

The outcomes were conclusive: the lighting computation produced more realistic and accurate effects. Night-time lighting effects were particularly well rendered and represented a significant advance in night-navigation simulation.

Work remains to be done on optimising hard- and software to achieve a satisfactorily marketable solution.

- 8 permanent jobs created with different partners
- MARVEST tools and services to be commercialised in 2012

Partners

Companies

Optis, Toulon [Project Developer]
ECA, La Garde
ECA-FAROS, Lannion
Genesis, Aix-en-Provence

Research centers

ClarTE, Laval
ENIB, Brest

Funders

- Fonds Unique Interministériel
- Conseil régional de Bretagne
- Conseil départemental des Côtes d'Armor
- Lannion Agglomération
- Collectivités territoriales PACA

Labelisation

28/09/2007

Overall budget

4 040 K€