



The DCNS Consortium

When we met Eric Lunven, responsible for prospective studies at DCNS, we quickly identified a potential collaboration with this high-performance Group based in Ruelle and featuring among the world leaders of naval defence systems. The mutual discovery of company knowhow continued during a business convention in May 2013, as well as during individuals meetings at both companies.

The DCNS Group has engaged collaboration with six companies, on R&D subjects linked with the steering of ships of the future. A consortium has allowed securing the industrial property of each partner.

“In the scope of its federative R&D program, baptized Advansea, DCNS works in particular on new models of interaction between Man and systems, while participating in significantly developing the operational capacities of ships of the future” Eric Lunven explains, who is in charge of innovating projects at the DCNS Angouleme-Ruelle site. *“The Group wishes to benefit from unexpected views and new maturities, and has approached SME’s in the Angouleme area with acknowledged experience in animated films, video games or sound design. The confrontation with our state-of-the-art knowhow has allowed developing unique concepts without any equivalent”.*



The consortium members are:

- **Game Audio Factory : Vincent Percevault**

The company proposes a complete management of the sound production line: audio consulting, audio programming, expertise on real time, R&D, sfx production and sound design (sound banks, on-site recording, foleys).

→ Mission DCNS :

Simulator sound equipment (creation of a sound and spacialization environment), sound installation (multichannel & multi-user), sound design for HCI, alarm management.

- **SolidAnim : Emmanuel Linot**

The company is specialized in movement capture. Its R&D department is very active and operates on various recording solutions:

- Solidtrack, a solution for integrating virtual elements with great precision into a video.
- Gleam session, real time face tracking solution.

The company references are at the crossroads of three industries: cinema (special effects), video games and 3D animation.

- **Studio Nyx : Romain Soulie**

This young company is specialized in the development of mobile applications and video games, in the creation of clear, synthetic and ergonomic interfaces, in gamification and HCI.

→ **Mission :**

Solidanim and Nyx Studio collaborate in order to propose a device for seaman recognition - eye-tracking.

The goal is to equip the commanding post and the "direct observation" post with a device enabling the scanning of a preregistered person's face. The HCI must display the scan return in real time. The system (sensor & HCI) also has to supply the eye position in real time in the reference characteristic of the sensor.

- **M4P : Philippe Métifet & La photo aérienne : Arnaud Devis**

These two companies collaborate since 2011 and have developed an autonomous multi-camera system, allowing the production of immersive high resolution 360° videos. The spectator is immersed in the video and can navigate in any direction at 360° during video play. It is possible to play the video on a PC, an iPad, a smartphone or on-line through the internet.

The shooting offers various possibilities: on the ground or in the air, moving or static. Example: use for aerial observation at low altitude on farm grounds, vineyards, forests or construction works, e.g. windmills.

→ **Mission :**

To make 3D immersive videos in a marine environment, which a goal to obtain 360° takes of the immediate perimeter of the vessel in order to detect small enemy watercrafts.

- **Dreamtronic : Olivier Défaux & Eve Barbara**

This is a startup that after two years of R&D has become an expert in multi-user application tactile system concepts, for tailor-made interactive immersion, 3DoF motion systems & interactive 3D stereo cinema.

→ **Mission :**

Multipoint tactile tablets, man/machine interface (HCI), multipoint dashboards.

- **Charente Développement : Jacky Guillien & Sabine Brandes**

→ **Mission :**

- Identify new markets and partnerships
- Contribute logistic support for project initiation (technical resources within companies)
- Legally secure consortiums (industrial property of every member)