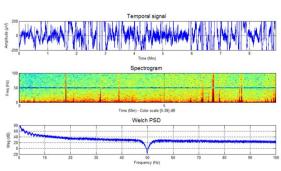
## CIQUETS Member of CMI DEFENCE

## **Brainwaves monitoring**

## **COGNISIM**

- How to evaluate the mental state, the stress and the cognitive load of a soldier who is learning how to deal with a tank turret on a simulator, or that of a pilot during an air combat training?
- What if we could capture, and interpret, his brainwaves, in order to provide the instructor an indication allowing him to adapt and personalize the training?





- Agueris research is focused on developing such a technology. On our booth H5-B367, you can discover **COGNISIM**. This ambitious project is supported by the French **Direction Générale de l'Armement** (DGA) through the **RAPID** (Régime d'APpui à l'Innovation Duale\* dual innovation support scheme) program.
- COGNISIM aims at developing an evaluation of the cognitive load and of the stress, starting from the brain activity real time analysis, which should be implemented in training simulators in order to adjust the simulation level to the status of the trainee. Training becomes then personalized, adapted to strong and weak points of each trainee, as the instructor is equipped with an objective tool form optimizing the training.
- Besides Agueris, the COGNISIM project puts together:
  - **Physip**, a SME responsible for the real time automatic identification of mental load and stress marker based upon the brain activity by electroencephalogram (EEG), using a reduced number of sensors,
  - **INSERM,** an academic partner,
  - and **Faurecia**, a large industrial group.





