



AUGMED

[Automated Serious Game Scenario Generator for Mixed Reality Training]

Open Source Intelligence · 8 July 2015 · Rome · Italy



Key Information

**[Call: FCT-7-2014, Law enforcement capabilities topic 3,
Pan European platform for serious gaming and training]**

[Budget: €5,535,675.29]

[Start date: 1 June 2015]

[Duration: 36 Months]



Partners

Stakeholders



End-Users



Research Institutions



Concept

The Problem

Terrorism is a **major threat to human life and critical infrastructure** in Europe. The intruders devise **new strategies and execution plans** that are increasingly **unfamiliar** to the security forces and therefore more **difficult to predict, prepare and defend against**.

Ashdod Port , Israel



London Underground



Moscow Domodedovo airport



Concept

Current Practices

Security forces are trained using **traditional methods** such as **live scenario** training though **full-scale field exercises**.

Martin Place, Sydney, Australia



Brisbane, Australia



Concept

Current Practices · Drawbacks

- Difficult and Expensive to set up and run
- Limited scenarios
- Limited effectiveness of training outcome: difficult to maintain uniform levels of skill, judgement and preparedness across teams and individuals (Bos 2004).

Concept

Alternative Methods · VR and Game based training

ETC training simulator



VXR platform deployed on an IGLOO360° environment



Concept

Current and Game based training· Limitations

- Focus on realism of agent and environment representation rather than behavioural and physical fidelity
- Agent behaviour and physical events (e.g., explosions, fires) are manually controlled by the trainers
- Highly controlled and, therefore, limited outcome scenarios
- Mainly designed for a single trainee usage
- No communications constraints are taken into account

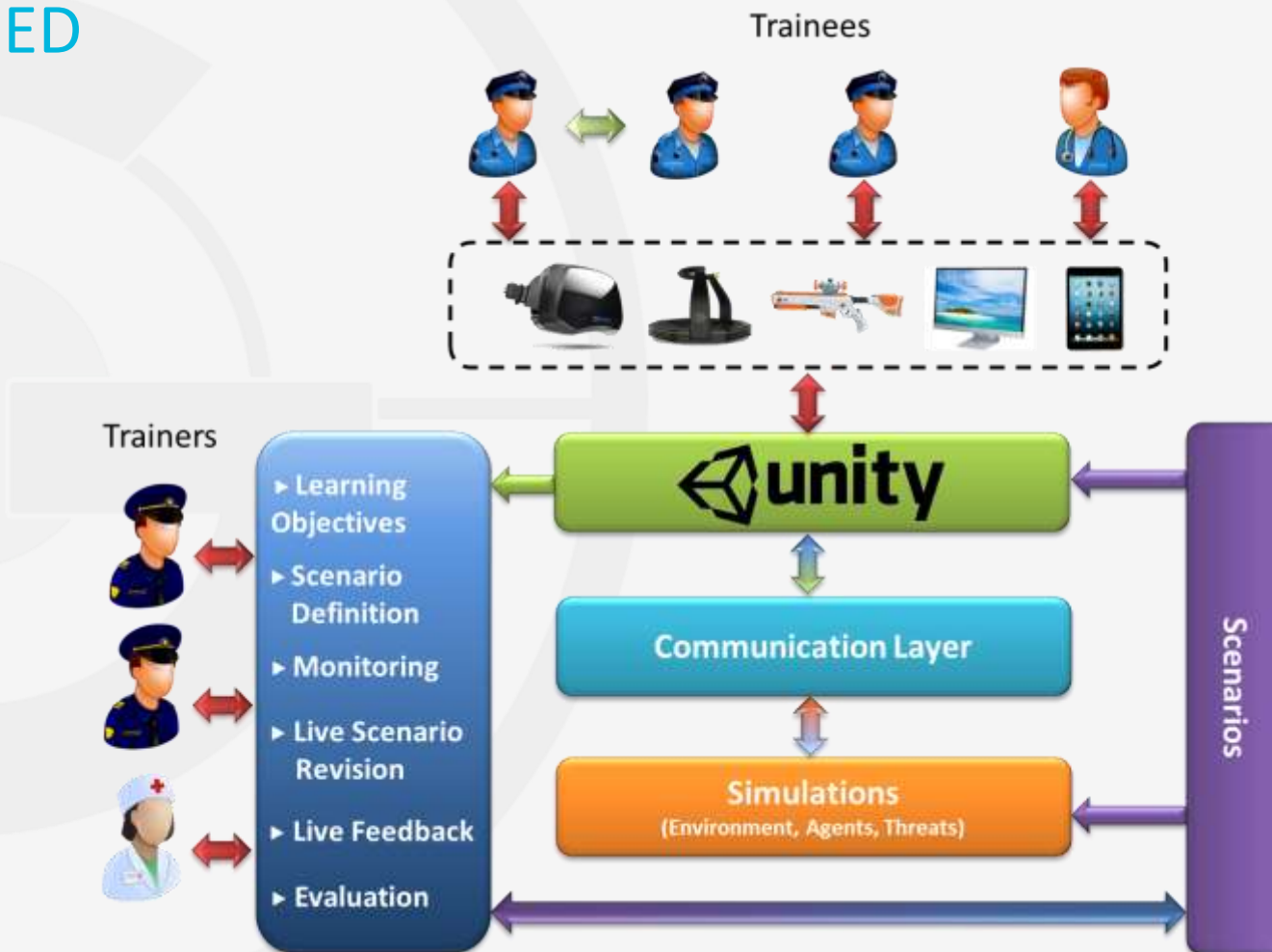
Concept

AUGMED · Flexible Platform

- **Single** and **cooperative** training from same or different organisations
- VR and MR platform offering **different levels of realism** and **interactivity** depending on the training requirements
- **Active engagement** through **non-linear, adaptive scenarios** with **multiple outcomes to actively engage**
- Simulate **communication** environment
- **Trainer tools** to set training objectives, monitor progress and assess performance

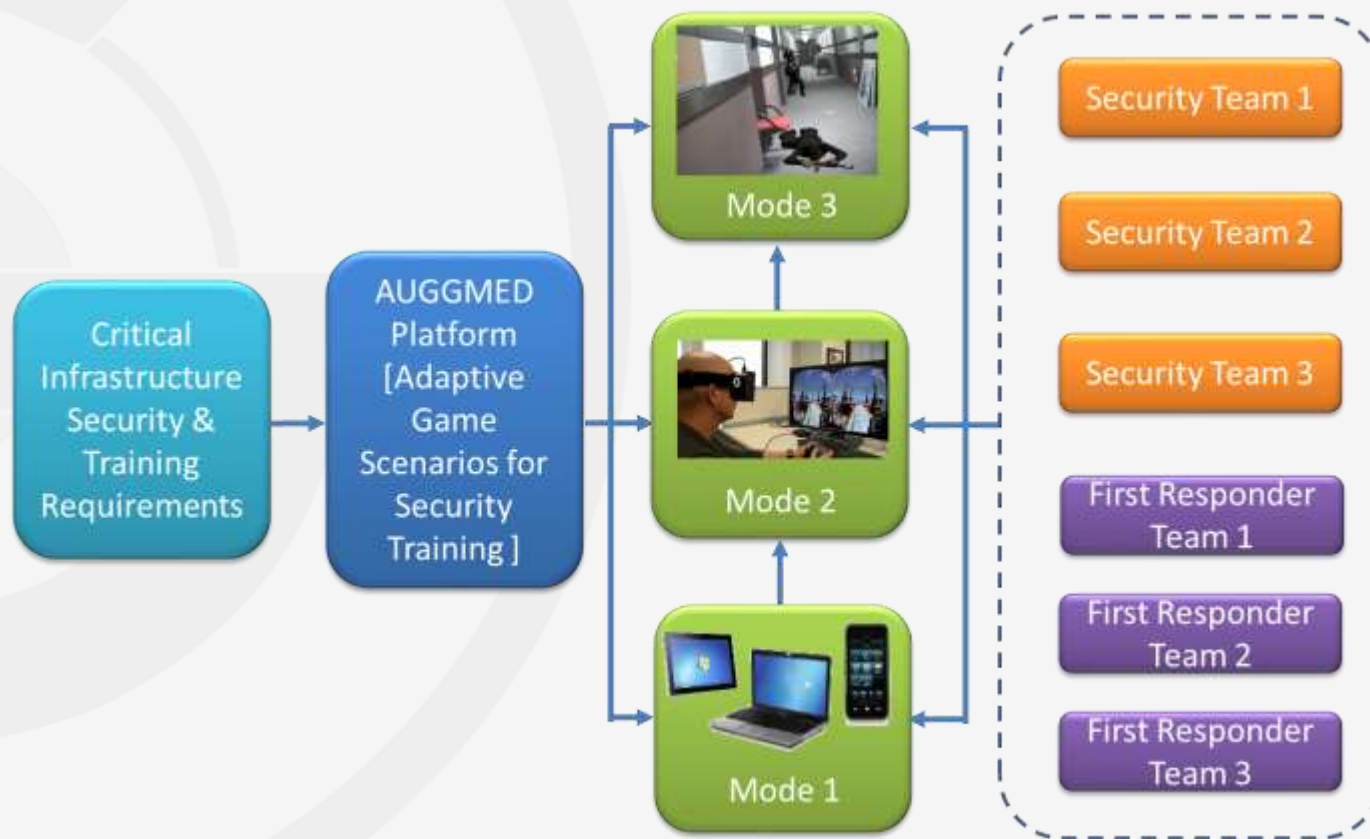
Concept

AUGGAMED



Concept

AUGGMED · Implementation





Concept

AUGG**G**MED · Scenarios

Scenario 1 · Cyber-attack

Scenario 2 · Physical attack

Scenario 3 · Physical+Cyber-attack at



Contact

Dr Christos Giachritsis (Coordinator)
cgiachritsis@bmtmail.com