



TARGET

INTEGRATING VR AND AR INTO SECURITY TRAINING

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TARGET CONSORTIUM

2ND OCTOBER 2018



Training Augmented
Reality Generalised
Environment Toolkit

WHAT IS TARGET?



Mixed-reality experiences immersing trainees at:

- Operational level
- Tactical level
- Strategic command level



Responding to a range of current European training needs:

- Tactical firearms events
- Asset protection
- Mass demonstrations
- Cyber-attacks
- CBRN incidents



Led and defined by end users from 6 EU MS:

- Slovakia
- Estonia
- France
- Germany
- Spain
- UK



PARTNERS

Technical Partners	End Users	Experts
    	 <i>Protecting local communities</i>    Fachhochschule Polizei Brandenburg   Deutsche Hochschule der Polizei	   

OBJECTIVES OF TARGET



enable EU user organisations to deal with security challenges



develop richer SCA training modules



better qualified staff



reduce costs for new training



speed up new training process



share best practices between EU organisations



enable societal dialogue



strengthen capabilities of SCA to deal with complex ethical issues



COMPONENTS WITHIN TARGET

VIRTUAL
REALITY

COMPETENCE
ASSESSMENT

DECISION
SUPPORT

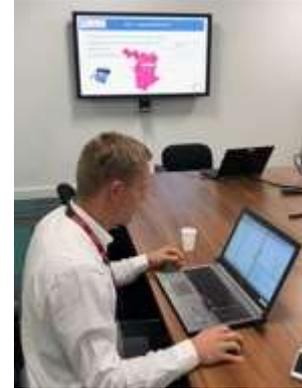
NON-LINEAR
SIMULATION



**NEW COMPONENTS
AND IMPROVED AND
ADAPTED EXISTING
COMPONENTS
FIT INTO THE
TARGET PLATFORM**



TOOLS WITHIN TARGET



AR / VR Headsets

Tracking Systems and Simulated Equipment

Command Post Software



GROUPS OF SCENARIOS – RANGE OF APPROACHES

- Tactical

- Firearms
- Territorial Policing
- CBRN Forensics

- Multiple levels

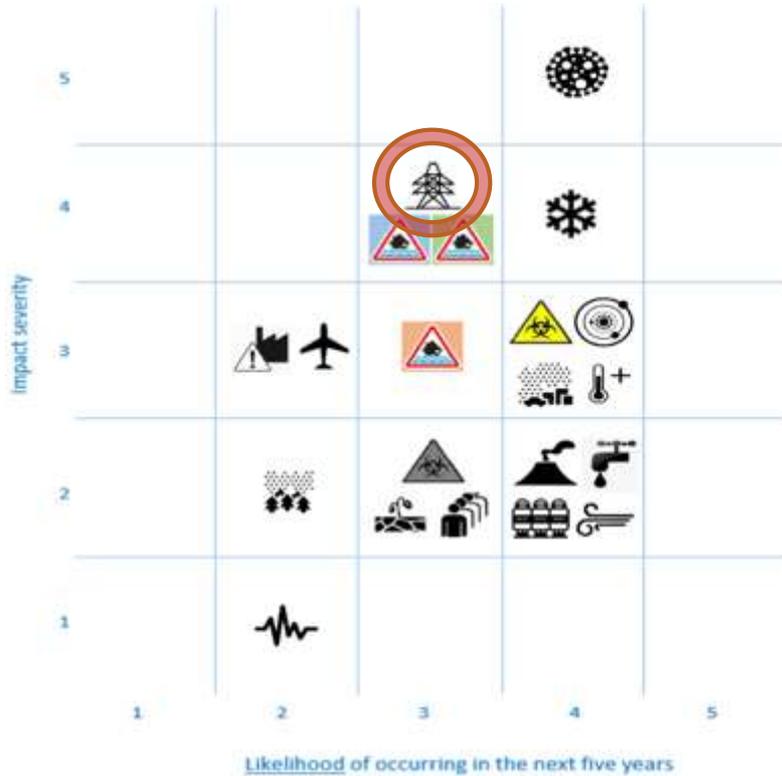
- Road Traffic Collision

- Strategic

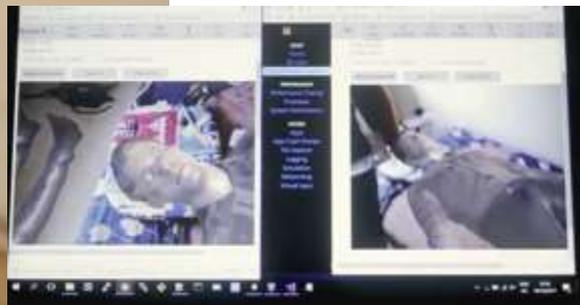
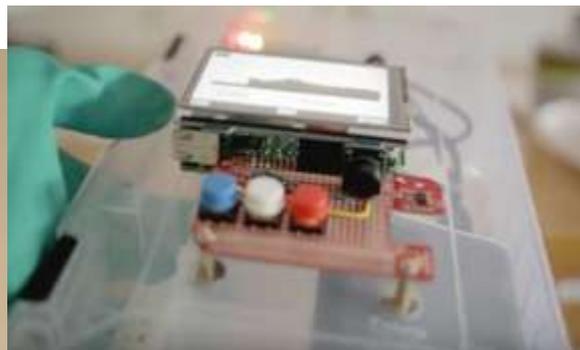
- Civil Unrest
- Cyber



THE SCARY ONE – TC3 CYBER



THE OTHER SCARY ONE – TC1 CBRN



PROCESS WITHIN TARGET

- Define the requirements with end users
 - Develop trial systems and content
 - Deliver trial exercise
 - Review
 - Repeat
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- We have now just completed the second set of trials
 - Significant improvement on first version
 - Now onto final revision – TRL6-7 only



WHAT HAVE WE LEARNT – THE GOOD?

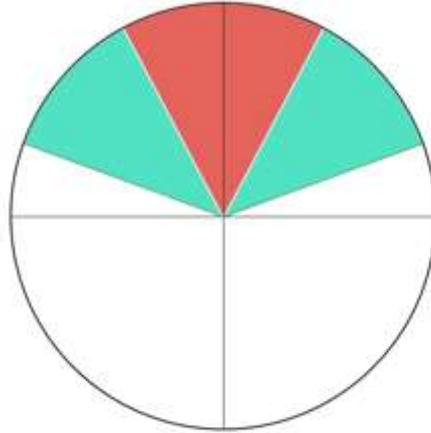
- Good applicability of the technology
 - Reduces the need for a specific environment
 - Can be very good
 - Cost effective
 - Easy to deploy
 - Engaging
 - Can be instrumented



WHAT HAVE WE LEARNT – THE BAD?

■ Main issues

- Field of view poor
- Limit on close view
- Tracking a problem
- Maturity of tools
- Maturity of platform
- Expectations



Human FOV
135°

Hololens FOV
30°



Minimum distance from objects
85cm



QUESTIONS?

- Merci Beaucoup
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