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Title	Challenging aspects of training system design for military vehicles using immersive synthetic environments.
Abstract	The following is a list of potential sub projects to be selected from and discussed based on current work packages and interests. Terrain Modification: Review solutions for terrain modification within a synthetic environment (Digging simulation). Focusing on an existing solution i.e. is it a novel approach or step to far with that toolset. The review would also include other approaches supporting the finial question can terrain modification ever have sufficient fidelity for training and user expectation. Simulator sickness: Simulator sickness is a particular type of motion sickness and this investigation would review aspects and causes of simulator sickness such as motion platform, visuals alignment and motion platform choice. These aspects would be reviewed on a particular simulator with the focus there effect training effectiveness. Simulator Visual Immersion: Investigation into creating simulated visual immersion for military vehicle applications. Investigate available technologies, toolsets and approaches considering both heads down and heads up operation of motion platform based simulators. The investigation would also include the factors and tolerances of the contributing technologies for trade off focused towards simulator fidelity and overall fit for purpose. A specific topic covered in this sub project would be 'Understanding the tolerance and mechanisms for visual alignment of projectors screen and source data?'. Embedded training: Embedded training refers to training functionality that is embedded into the system that is being trained. There are various levels of embedded training from mounting

	computer based training on vehicle to full visual immersion systems and this investigation would focus on the latter for a military vehicle. Pre-existing solutions and technologies would be considered again focused simulator fidelity and overall fit for purpose. A specific topic covered in this sub project would be 'How vision blocks / periscopes are simulated for an embedded solution?'. Common User Interfaces: Investigation into common information systems and interfaces across platforms and battle group control. Using common interfaces reduces levels of training for large organisations and enables quicker decision making through quicker understanding of presented information. Investigate the feasibility of how data can be presented in a common format across platforms and how existing and new user interfaces can have common elements.