1 Publishable executive summary

1.1 Project Summary

The goal of the **AVATARS** project is to develop a range of innovative technologies to allow the simulation of passenger movements in and around rail terminals in emergencies and in normal circulation behaviour. The tools have been created to enable designers to populate structures with large groups of realistic, interacting agents and follow their movements through a series of pre-defined, realistic scenarios. In this way **AVATARS** allows building and infrastructure design to be tested for passenger comfort and convenience at the design stage.

In order to achieve this, **AVATARS** envisaged the development of three major software components.

~ The first to looks at agent interaction, specifically their interaction with each other and with their environment.

~ The second component is a tool to rapidly generate realistic test scenarios, in order to speed up and simplify simulation runs.

~ The third is a tool to assist users in isolating the cause of any problem within the terminal design.

The evaluation of the tools has been carried out under a series of case studies, developed throughout the project taking real-world information from operating terminals and trains and produce complex, multi-event scenarios capable of evaluating the abilities of the **AVATARS** software.

The **AVATARS** project is now complete and the prototype software has been developed according to the requirements and specifications of the end users partners. The software has been tested against real world data in realistic scenarios and the **AVATARS** partners have achieved their quantifiable objectives for the software.

1.2 Partners

The **AVATARS** consortium consists of 6 partners from three European countries.

Role	N°	Participant name	Short name	Country	Start	Exit
CO	1	British Maritime Technology	BMT	UK	Month 1	Month 31
CR	2	University of Salford	USAL	UK	Month 1	Month 31
CR	3	BURO Happold	BURO	PL	Month 1	Month 31
CR	4	University of Greenwich	UoG	UK	Month 1	Month 31
CR	5	Autoritat del Transport Metropolità	ATM	E	Month 1	Month 31
CR	6	Ferrocarrils de la Generalitat de Catalunya	FGC	E	Month 1	Month 31