

Central London Testbed Project

Middlesex University and Kings College London

Project Title Central London Testbed Project

Project Overview A Cooperative Intelligent Transportation System (C-ITS) will revolutionise the way we live. In order to understand this coming age, it is necessary to build new technologies, testbeds and applications that will give us insight into this brave new world. The Department for Transport (DfT), Middlesex University (MDX) and Kings College London (KCL) are building a Federated Connected Vehicle Testbed System as shown in Figure 1.

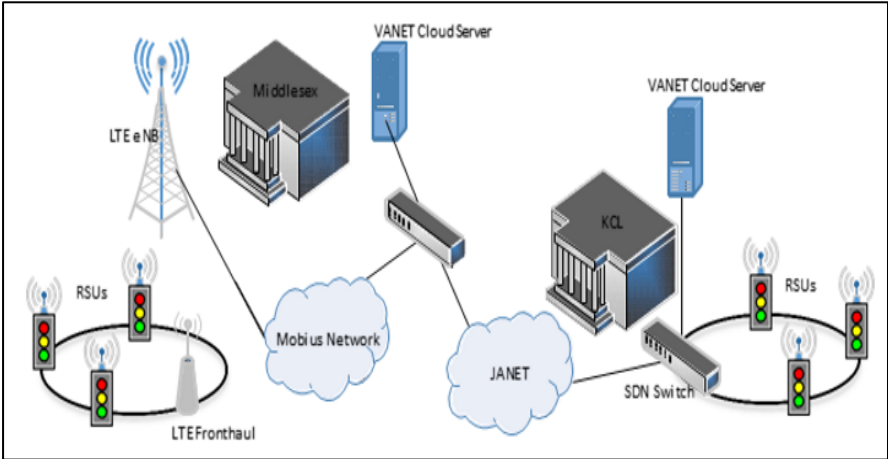


Figure 1: The Federated Connected Vehicle Testbed System

Project Goals

VANET /5G APPLICATIONS			
Vehicle Control	Connected Services	Integrated Transportation	
Traffic models	Road Safety	Disaster Management	
INTELLIGENT INFORMATION PLATFORM			
Location	Vehicles	Users	Infrastructure
VANET /5G TESTBEDS			
Vehicles	Mobile Comms	Geo-Spatial Info	

Figure 2: The Connected Vehicle Application Framework

The key objectives of the project are to explore the development of a C-ITS system by building two testbeds and to use data from the testbeds to investigate the building of applications for the Connected Vehicle environment using VANET/G5 technology as well as emerging 5G mobile networks, as shown in Figure 2.

Project Status

The Middlesex Testbed has been built along the A41 (Watford Way) and on the Hendon Campus as well as surrounding roads. The Kings College Testbed has been built at the Kings College, along the Strand in Central London. Both testbeds, shown in Figures 3 and 4, use VANET/G5 technology and are fully operational. Once they become available, 5G test modules will also be added to these systems.

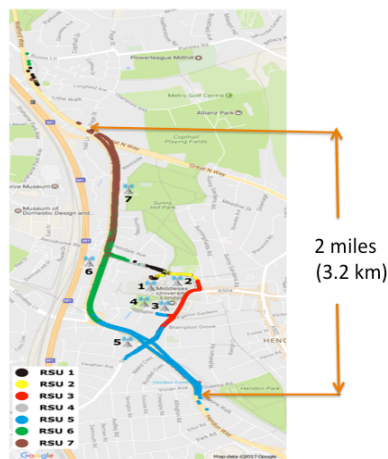


Figure 3: The Middlesex Testbed

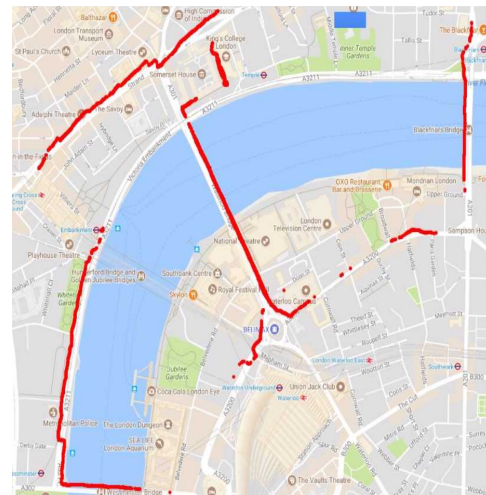


Figure 4: The Kings College Testbed

Partners



Contact Information

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