



**TRANSPORT
FOR LONDON**

EVERY JOURNEY MATTERS

GETAWAY Project

A quick summary of the GETAWAY project

by Tomasz Stachowicz

Assistant Engineer D&EM

Fire Compliance Team

Station Systems Engineering

London Underground

With Support from Team GETAWAY

Emergency Exit

- **An emergency exit is a special exit for emergencies such as a fire:**
- **The combined use of regular and special exits allows for faster evacuation,**
- **It also provides an alternative exit if the route to the regular exit is blocked by fire or other incident for example terrorist attack.**



The Bad History – Little Reminder

- 1987 – King's Cross Fire (31 dead)



1987 King's Cross T/H Escalators



1987 King's Cross Ticket Hall



1987 – King's Cross



Better and Safer Future



GETAWAY

Generating simulations to Enable Testing of Alternative routes to improve WAYfinding in evacuation of over-ground and underground terminals



Introduction

- **Duration:** from November 2011 to October 2014
- **Budget:** € 3,108,537.4 with EC contribution of € 2,161,722.00,



Team (Consortium)



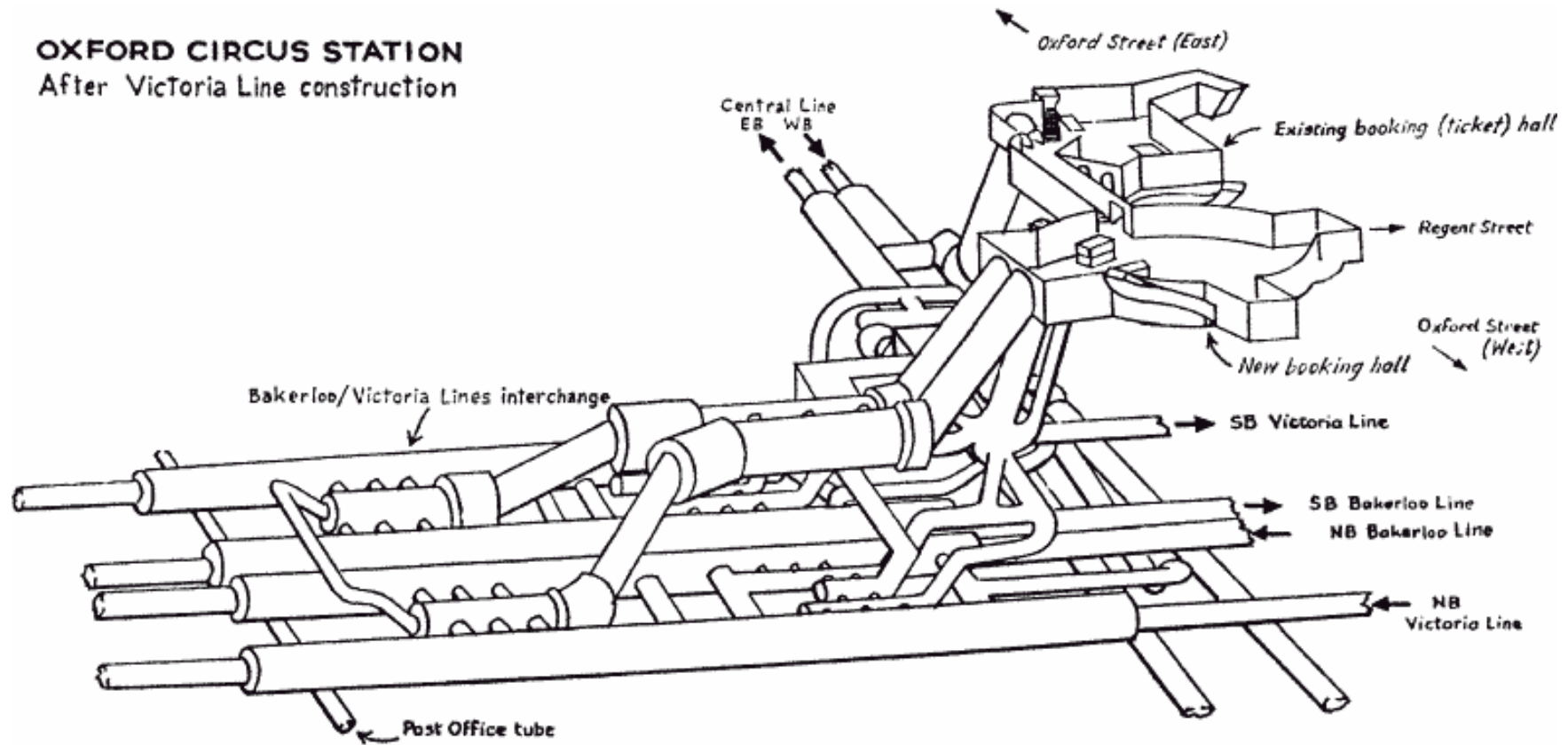
The challenge

- Modern terminals are often large and complex and they may interchange with other buildings for example Bank, CrossRail Stations, Waterloo
- In emergency situations large volumes of people need to be evacuated quickly and safely
- King's Cross fire, terrorist attack in 2007 and other similar incidents around the world are examples showing that current evacuation technologies and/or procedures may not be adequate

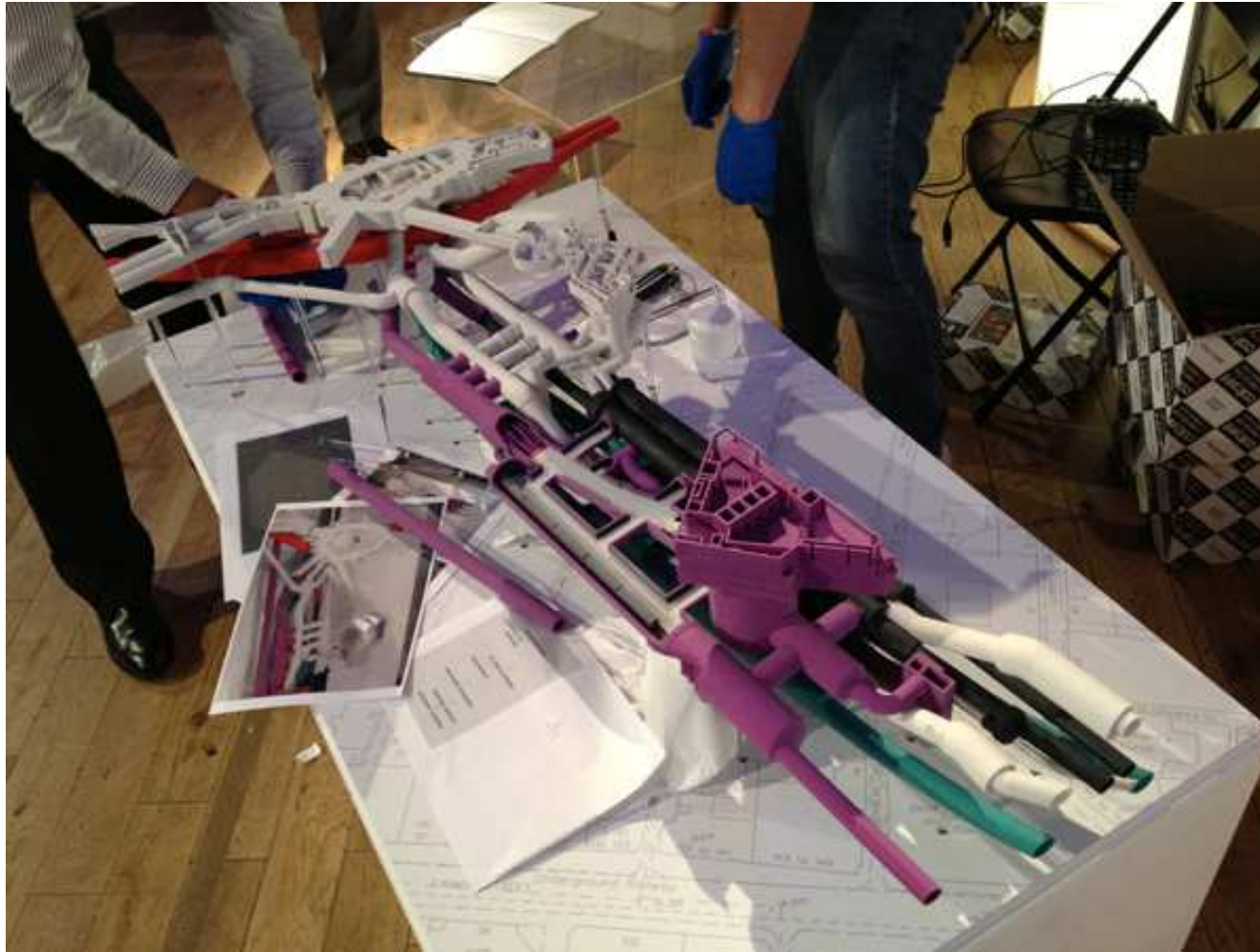


The challenge

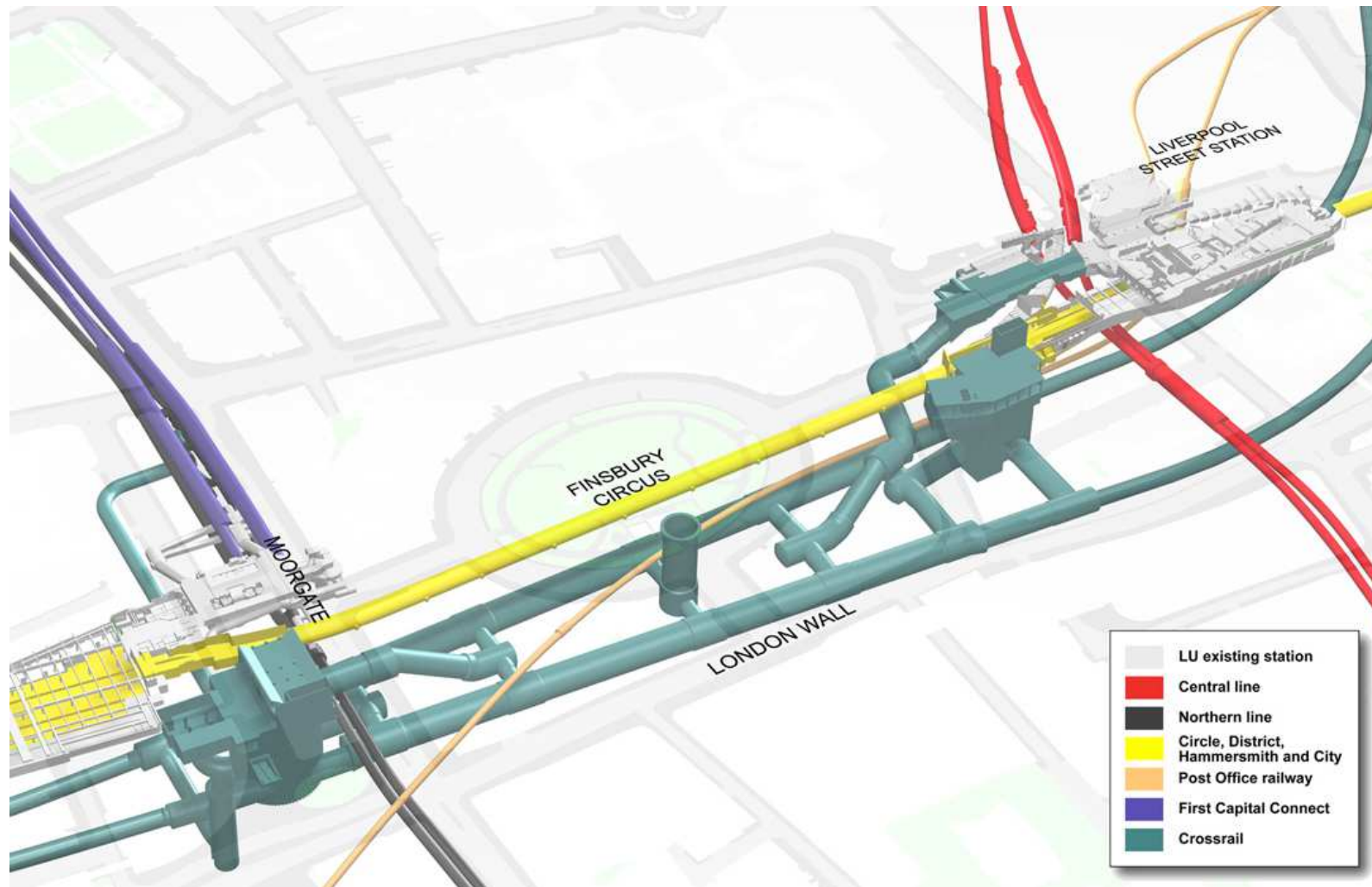
OXFORD CIRCUS STATION
After Victoria Line construction



The challenge



The challenge



Objectives

- Improve the detectability of the existing evacuation signage system
- Provide real-time optimal evacuation strategies by making use of:
 - Changes in environment (detection systems)
 - Changes in number and location of people
 - Faster than real-time evacuation simulations



Work focus

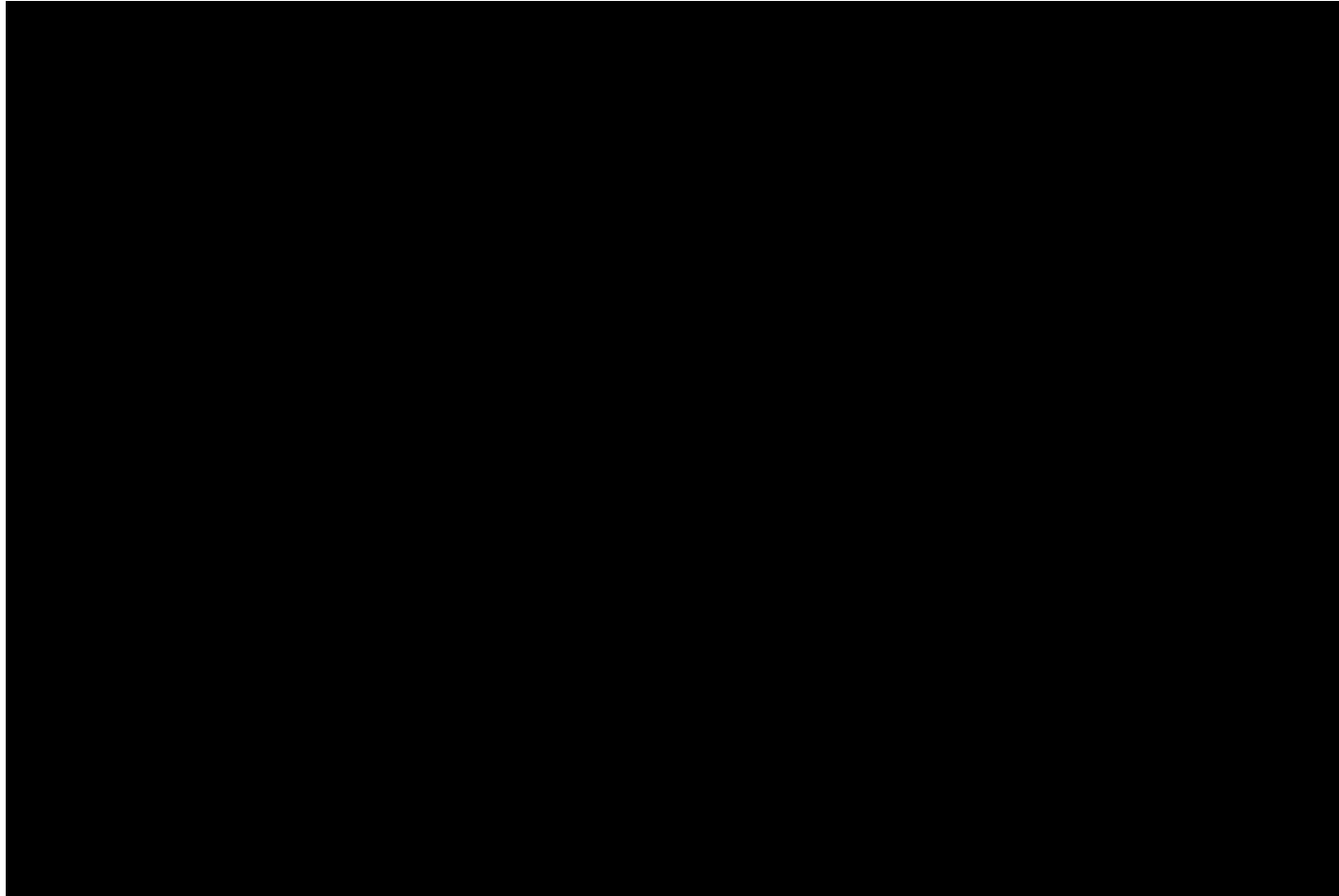
- Requirements of current evacuation procedures (CCEPs, interface with emergency services etc....)
- Limitation of current evacuation signage system (currently we are using passive type signage)
- Design, develop & test a new signage system (passive and active signage in one)
- Design, develop & test new intelligent system that monitors changes and adopts to the evolution of the incident and provides optimal evacuation routes



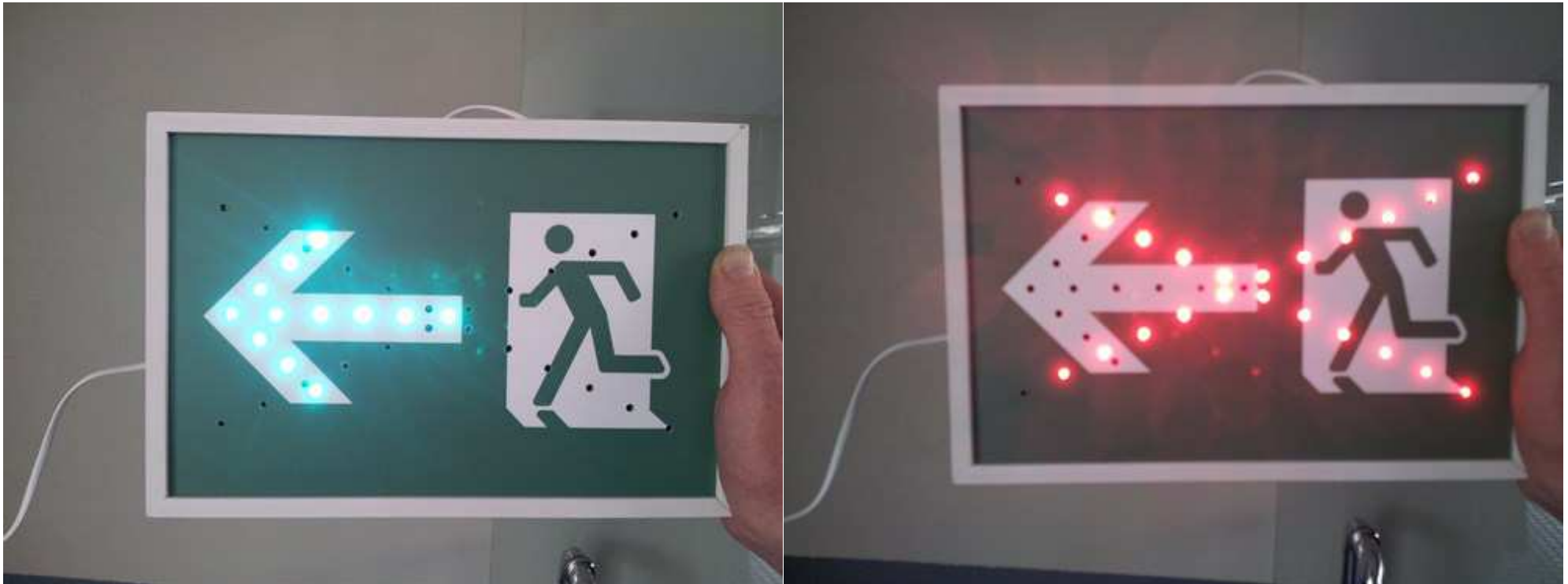
Passive signage systems



New active signage



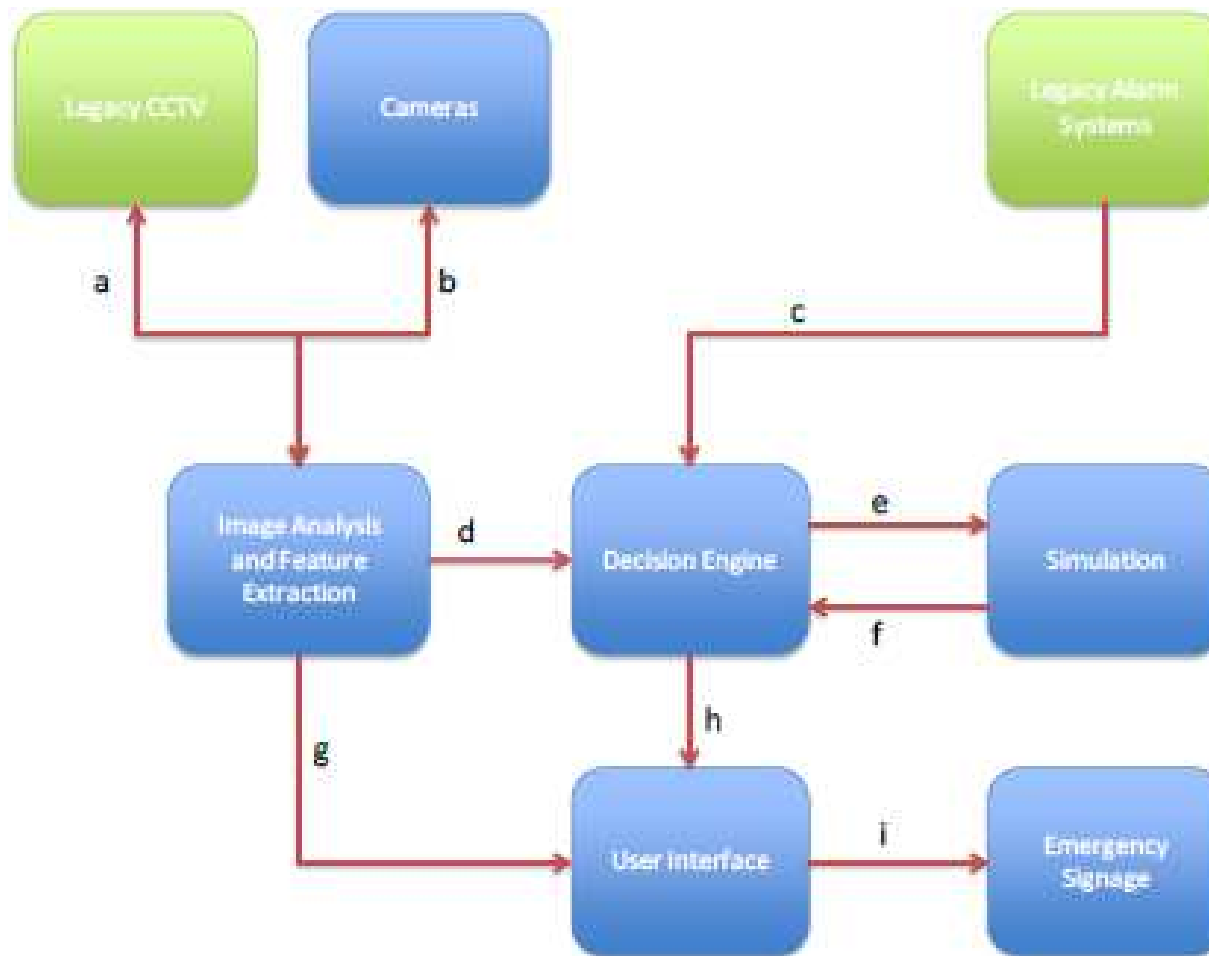
New active signage by EvacLite



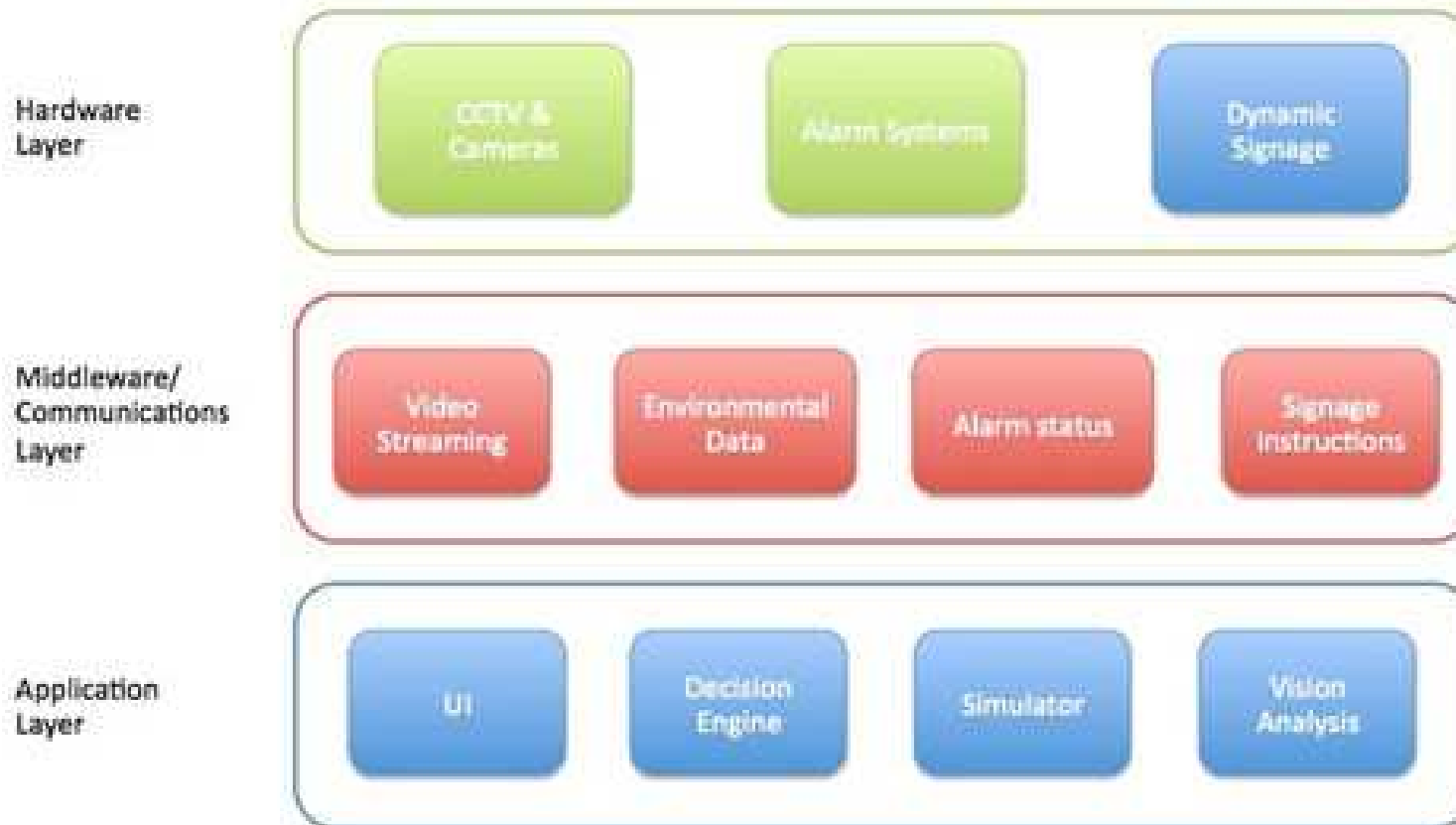
Other products are also available



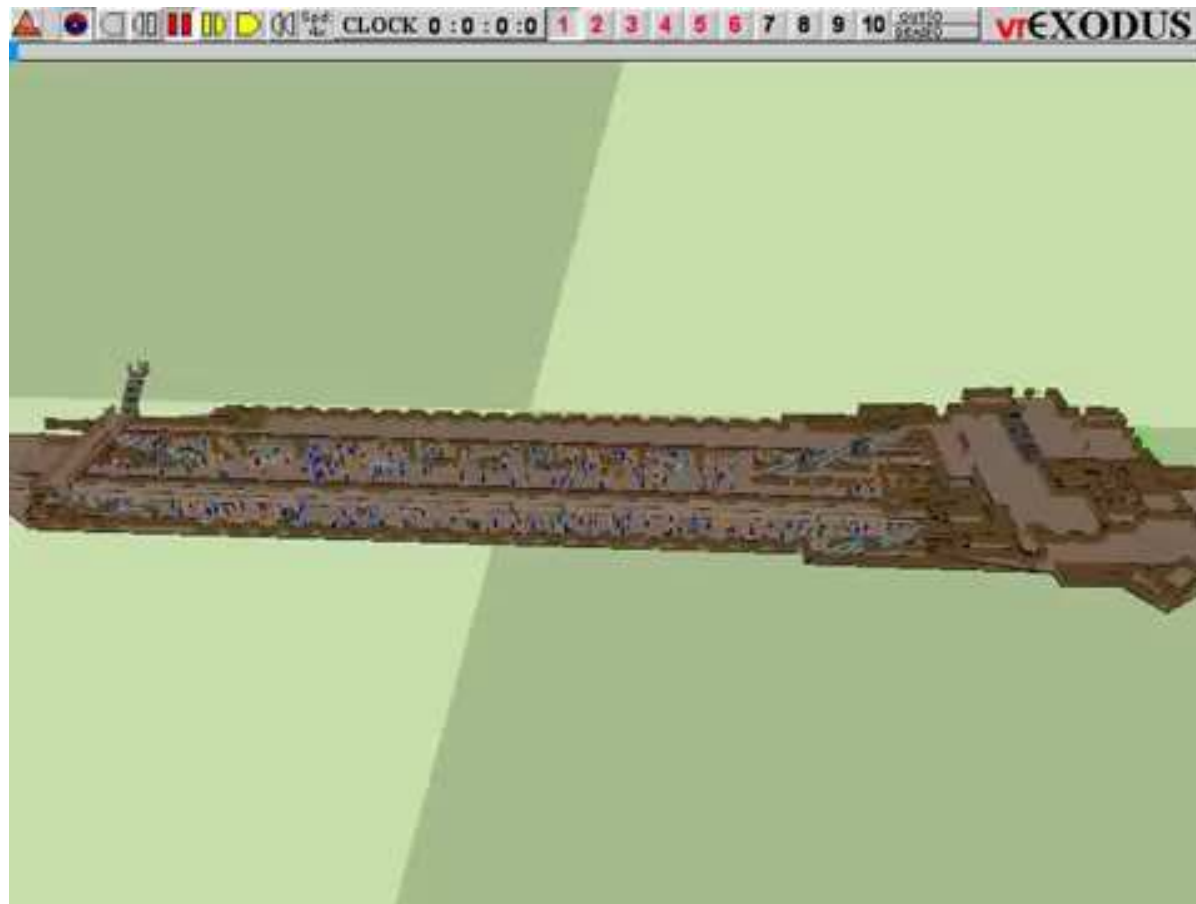
Complete System



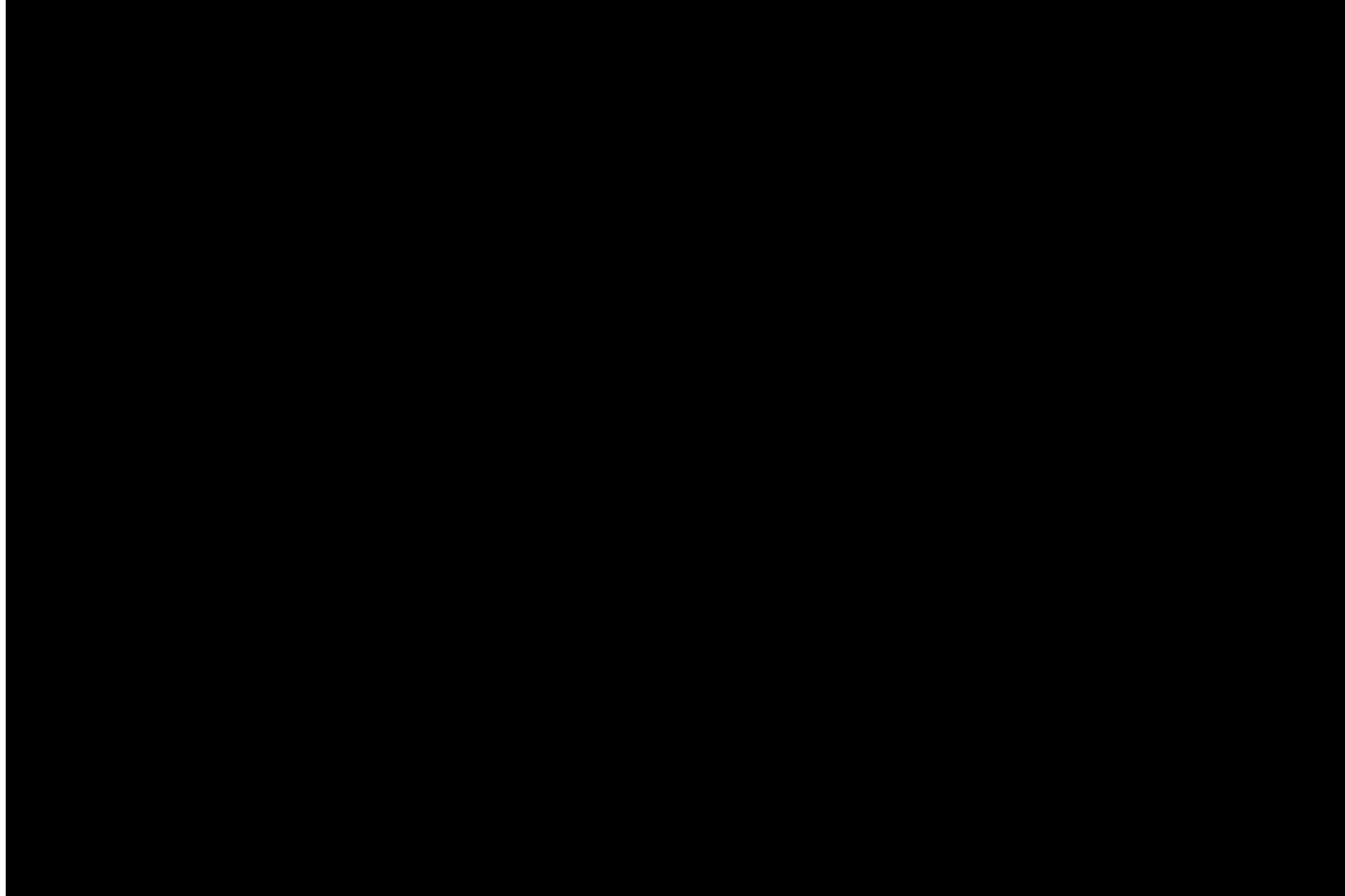
Complete System



Complete System



Complete System



Live trials of IADSS



Results

- 103% increase in sign detection (38% with passive signage, ~88 % with active signage)
- 44% faster passenger decision time
- Without GETAWAY: All people chose nearest exit
- With GETAWAY: Most people chose exit indicated by the active signage
- This may have positive implementation on our complex LU Stations.





GETAWAY

Open to Europe's Future of Innovation



The End



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