

HINKLEY POINT ENERGY EFFICIENT INTERSECTIONS

PROJECT UPDATE NOVEMBER 2017

PROJECT DESCRIPTION



Hinkley Point C is one of the largest construction projects in Europe. Up to 750 HGV movements are expected every day. For each shift up to 5,600 construction workers will be transported from park and ride facilities to Hinkley Point 'C'. Traffic will be routed via one of the two designated routes, through Bridgwater. Route repeatability and journey frequency presents a unique opportunity to evaluate traffic Signal Phase and Timing technology, where construction traffic estimates suggest up to 3 million vehicle kilometres will be travelled, with 615,000 intersections crossed.

This EEI scheme aims to reduce the impact of these vehicle movements through more efficient control of vehicle start/stop cycles, by enhancing existing traffic signals and deploying Connected Intelligent Transport Systems technology in HGVs and PSVs.

OBJECTIVES

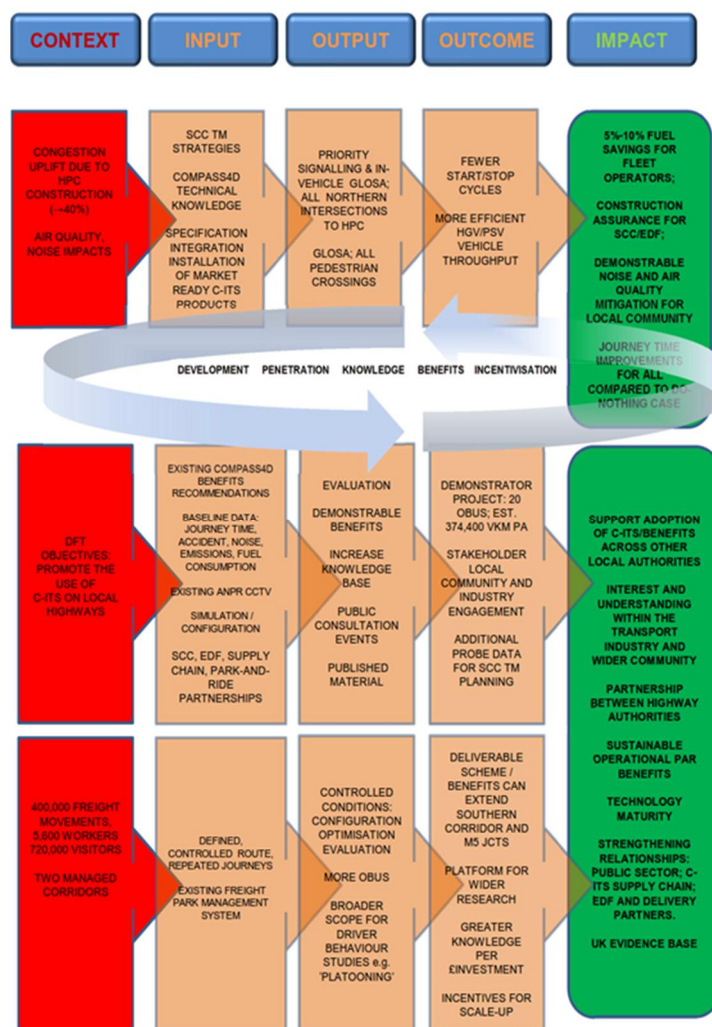
A corridor of Energy Efficient Intersections (EEI) will be deployed on the strategic route from freight park and park-and-ride facilities on the M5 J24, through Bridgwater to the nuclear construction site at Hinkley Point. HGVs and park-and-ride buses will utilise ITS-G5 on-board units, communicating with traffic signals to provide advance traffic signal phase / timing information and 'extended green' priority.

Existing arrangements for traffic management and monitoring will be utilised to evaluate the impact of reducing start/stop cycles on fuel consumption, emissions, and journey times.

The findings will be used to support DfT objectives to facilitate the wider adoption of C-ITS services by Local Authorities, by demonstrating commercial and societal benefits through reductions in journey times, fuel consumption, and emissions.

DELIVERABLES

- Evaluation Plan
- Interim Report
- Final Report (inc BCR, Considerations, Recommendations)
- 'Exploitation, Ambitions and Barriers' Report
- Marketing Material



MILESTONES

- HGV/ PSV User & wider stakeholder agreements.
- Surveys & roadside / in-vehicle system design.
- Technology procurement & deployment.
- Configuration & testing.
- Operational evaluation & performance validation.
- Final report & marketing / dissemination.

PROGRESS TO DATE

- User agreements secured, communications plan in place.
- Equipped vehicles will be PSV only (20 of); HGVs not now due to route from J24 M5 until 2018.
- Architecture and functional system design complete.
- Technology options agreed, including algorithmic design by Siemens; procurement underway.
- Draft evaluation plan substantially complete.
- Requirements for ANPR, in-vehicle logging, UTM, and vehicle tracking agreed; data available.
- Completion June 2018.

PARTNERS



CONTACT

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