Siemens Consultancy Services team provides bespoke modelling services to assist clients with scheme evaluation projects.

In the current policy and funding climate it has become more critical than ever to test and prove schemes in a cost effective manner before commitment to project budgets. Selecting an appropriate tool and method to model and evaluate a scheme is important in developing timely and cost efficient solutions.

Siemens Consultancy Services' experience with a variety of traffic modelling and microsimulation packages means that we can recommend the most appropriate method for our clients' requirements.

Benefits of Siemens modelling services

In completing modelling projects, Consultancy Services is able to apply experience of ITS solutions, design and signal control methodology to studies enabling a full assessment of scheme and technology options prior to deploying an operational solution. Expertise in the intricacies of controller configuration and signal optimisation adds benefit to the modelling of the urban environment and allows comprehensive appraisal of different control methodologies, including adaptive control or the operational benefits of providing bus priority and additional infrastructure.

Our knowledge of up to date industry modelling tools offers maximum client flexibility with a range of simulation services, creating bespoke projects to clients' requirements to present the results needed in the most direct and cost effective manner.

Comprehensive reporting makes the results of studies accessible to a range of audiences through 3D graphics, video outputs and graphic presentation techniques.

Strategic Planning

Long term strategic network planning is an integral part of traffic management and has been pushed to the forefront following the Traffic Management Act amendments. Modelling with adaptive control can provide the network manager with a realistic tool for network and event management. Demonstrating and simulating the effect of SCOOT and MOVA within a model provides a safe environment in which to test strategies and makes the perfect implement for training and developing skills in validation.

Services offered by Siemens:

- ITS planning
- Scheme design
- Junction assessments
- KPI management
- SCOOT and MOVA configuration and validation
- Project management
- Installation
- SAT and FAT commissioning
- Managed services
- Maintenance
- Partnerships
- Microsimulation

Microsimulation

Traffic Solutions

SIEMENS

Specialist Software

Siemens has developed SCOOTLink to enable UTC control to be applied realistically in microsimulation models. Solutions and scenarios can be tested in context to show how the solution would be applied on street. Using UTC with microsimulation allows a detailed appraisal and analysis of strategies to aid in the decision-making process.

Turn Key Solution

Siemens' services lead the client through the conceptual modelling phase through design, implementation and on-street validation of signalled solutions.

Keeping the end scheme design, operation and maintenance at the forefront of model assessments ensures the result is readily transferable to an on-street scenario. Modelling projects include informed advice on scheme design and peripheral appraisal of implementation requirements which smoothes the transition between traffic modelling and on-street working.

In House Support and Training

Our dedicated modelling team can provide additional resource at crucial stages during model development and scheme design. A model audit and support service can help clients understand and extract information from studies submitted in support of 3rd party schemes and also advise on representation of signal strategies in the simulated environment.

In conjunction with our training school we are able to offer bespoke training packages for our clients as required.

Microsimulation from Siemens

Network operation accurately modelled provides an effective decision support system for many traffic management situations.

Modelling and evaluating networks of all sizes using microsimulation and empirical analysis tools.

Comparison of junction design alternatives

- Test control and layout amendments
- Helping the client to a solution which can be transferred to the real world
- Evaluating the operational efficiency of the existing and proposed systems
- TR2500 preparation and CLF plan construction for fixed time operation
- Comparing operation of different control methods (including MOVA and SCOOT)

Scheme planning

- Visual representations of entire network impact
- A robust statistical output to support reporting

Incident strategy management and decision support

- Offers off-line development, evaluation and maintenance of strategies for integration and deployment with Comet
- Using a developed model to enhance network management decisions based on off-line recreation and experimentation of scenarios and incidents.

Network fault tolerance analysis

- Measures effects of faults on operation of network

Roadworks design

- Assesses the impact of a temporary reduction in capacity
- Experiment with temporary timings plans

Priority scheme testing

- Provides impact analysis of bus, cycle and pedestrian priority schemes

Demand management

- Measures effects of increased traffic flow and developing management strategies

Journey time planning

- Through data collection gives an accurate reflection of journey planning

Environmental modelling

- Provides comparative assessments of schemes with a number of emissions ITS application analysis
- Analysis on route guidance and VMS systems

Training and Support

- Bespoke training in a variety of simulation and modeling packages
- Comprehensive model auditing service
- Scheme design support services, advice on scheme implementation and design considerations
- Assistance with site surveys and aspects of data collection

For further information, please contact:
Siemens Mobility, Traffic Solutions, Sopers Lane,
Poole, Dorset BH17 7ER UK

Telephone: +44 (0) 1202 782000
E-mail: sales.stc@siemens.com

www.siemens.co.uk/traffic