



## Royal Mail

# Postal transport network re-design

### Challenge

Create a single, cost effective and flexible postal distribution network

### Approach

Utilize PlanOp to review current distribution network and determine broad strategic options for a new network

### Results

PlanOp helped develop a new distribution network for Royal Mail set to reduce:

- operating costs by £90 million per annum
- vehicle numbers by 2,500
- CO<sup>2</sup> emissions by 35%.

The Royal Mail operates the UK's largest road vehicle fleet of 40,000 vehicles as well as overnight rail and air networks moving some 81 million letters a day. In June 2001, Royal Mail announced a radical review of its entire road, rail and air transport links. The objective of the re-design was to improve service, increase efficiencies and lower costs.

At the beginning of 2001, Royal Mail selected PlanOp, Carmen's logistics optimization software, to assist in rationalizing their postal transport network. The decision to adopt PlanOp came after an exhaustive search and an analysis of other potential products. In fact, PlanOp was found to be the only software that was available, in an operating and tested form, that could be used to create a completely new, efficient transport network not only from scratch, but that could simultaneously optimize on the key criteria of cost minimization, simplicity and robustness. Over a period of 25 weeks, PlanOp was implemented in Royal Mail.

Much of the implementation was undertaken in workshops where the Royal Mail personnel learnt and used the software to undertake a major multi-modal transport review of their mail transport network.

PlanOp was used to develop a network based on hub and spoke road services, augmented by dedicated aircraft services for priority product. The results showed that Royal Mail could rationalize its existing transport operations to create a much more efficient single network.

Andy Jenkins, Head of Network Planning, and manager responsible for the selection, implementation, deployment and use of PlanOp in Royal Mail, has been delighted with the results achieved. "PlanOp was the only tool capable of doing this work in the timescales we had", he said. Mr Jenkins says "PlanOp is the driving force behind the success of the multi-modal review. Without it, Royal Mail would not have been able to prove the viability of the radical changes that were decided upon". This review is set to save Royal Mail over £90 million per annum.

PlanOp is the only tool that allows timely evaluation of a great many possible scenarios (strategic alternatives) for future transport network needs. He believes "PlanOp is the ideal tool for businesses that are seeking to evaluate potential changes in service mix, location and modes with time-critical products. It provides a unique capability to see the costs of proposed changes in network structure and modal utilization".

### About Royal Mail

The Royal Mail is a public limited company wholly owned by the government, with annual sales in excess of £8 billion and more than 222,000 employees.

The Royal Mail provides mail, parcels, express services and post office branches along with hundreds of services to meet new demands – from electronic billing to banking and warehousing to customer returns.

Mr Jenkins also believes the software has a broader application in the transport industry as it would be ideal for transport companies that are looking to develop further network capability or determine the correct mix of transport mode.

### About Carmen Systems

Carmen Systems is recognised as one of the world's leading software and operations research companies. Headquartered in Goteborg, Sweden, Carmen has major offices in Brisbane, Singapore, London, Montreal, Stockholm and Copenhagen. Carmen's products are:

- **PlanOp**  
Distribution and logistics network planning
- **CRS**  
Rail crew management
- **RSD**  
Real time freight car planning
- **CCM**  
Airline crew management
- **IPTIS**  
Public transport journey planning
- **OR Services**  
Operations Research consulting

*"PlanOp has revolutionized the way Royal Mail manages its network delivery structure and costs. It provides a level of viability across multi-modal activities, which allows a business to assess, plan and develop transport network scenarios for future business".*

*Andy Jenkins  
Head of Network  
Planning,  
Royal Mail*



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