

Value proposition

Capital efficiencies in the Managed Motorways programme must be considered alongside the operation and maintenance costs if optimised management of the asset is to be achieved, insists

John Westwood

Customer feedback and monitoring results have demonstrated the early successes of introducing managed motorways into the UK's highly congested networks. The operational schemes on the M42 and M6 are both providing additional dynamic capacity and smoothing traffic flows to make commuters journeys a little more bearable. Those who remember the stressful, start-stop commute between junction 3A and 7 of the M42 are very grateful for this and the business cases show positive benefits are being achieved for the economy.

Delivering an MM scheme is only the start of the asset lifecycle and once built it must then be operated and sufficiently maintained to enable the benefits to continue to be delivered. To ensure that all aspects of the lifecycle are understood and budgeted for and all efficiencies realised there needs to be a balanced focus on both capital and revenue spending.

Since the success of the M42 ATM Pilot there has been a significant focus in establishing a programme approach for the rollout of managed motorway schemes. This should provide the controls to identify and deliver year-

on-year efficiencies that the economic environment now demands of public spending. But to provide best value for money and protect against any erosion of benefits, the focus on efficiencies in capital expenditure must not be banked without fully assessing the whole life cost implications and in particular the operational and maintenance needs. This can be termed as 'optimised asset management'.

Within the Highways environment, optimised asset management has often been limited by the accessibility of asset and performance data that can then be analysed to inform future maintenance plans and budgets. This situation is often compounded by difficulties in integrating the different asset systems used to hold technology and highways asset data. Furthermore, to use England as an example, the maintenance of

technology is undertaken by the Technology Managing Agent Contractors (TechMACs) and everything else by the Managing Agent Contractors (MACs) and both these roles are aligned to different areas of the network. As a result, the approach to maintenance has not always been as joined up as it might be.

WHAT DOES AN OPTIMISED APPROACH ENCOMPASS?

There are many aspects to consider in moving towards an optimised asset management-led approach, and this will often involve transformation across an organisation with investment in new systems and processes as well as alternative procurement strategies. The model in Figure 1 illustrates the fundamental elements and how a strategic approach across an organisation, supported by decision-

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making tools, provides optimised approaches to maintain the required outcomes from the asset.

The benefits of applying a model such as that in Figure 1 are that limited public funds can be prioritised where they will achieve the best operational outcomes for the road users and the economy. Another benefit is improved visibility and predictability of where the required funds need to be invested which will support public bodies, such as the Highways Agency (HA), in developing stronger business cases for funds from Central Government.

It is therefore no surprise that the Highways Agency (HA) has been reorganising to enable integrated asset

management (IAM) and they have embarked upon the procurement of new systems to manage their asset information and provide one source of the truth.

They have also started to procure their new Asset Support Contractors who will have responsibility for maintaining and improving the assets, based on outcome performance, and the Regional Technology Maintenance Contractors (RTMCs) who will maintain the technology.

The procurement of ASCs rather than MACs represents a clear change of emphasis and now provides an integrated service across the whole highways asset for improvements that

should enable funding to be prioritised. The maintenance will still be delivered separately for the technology but it is likely that this will be focussed mainly on the provision of specialist resources and knowledge with the decisions on where best to focus those resources being influenced by the ASC role.

OPPORTUNITIES KNOCK

The Highways Agency are investing for the future, but transformation to a high performing 'asset management-led' organisation will not happen overnight so it is important to focus on the 'quick wins' along that journey. Listed below are just a few of the potential initiatives that could provide further revenue efficiencies alongside the capital savings that will be delivered through the MM programme.

- Moving towards outcome-based performance measures rather than prescriptive maintenance requirements.
- Aligning the outcomes for both the ASC and RTMC service providers and move towards sharing of asset



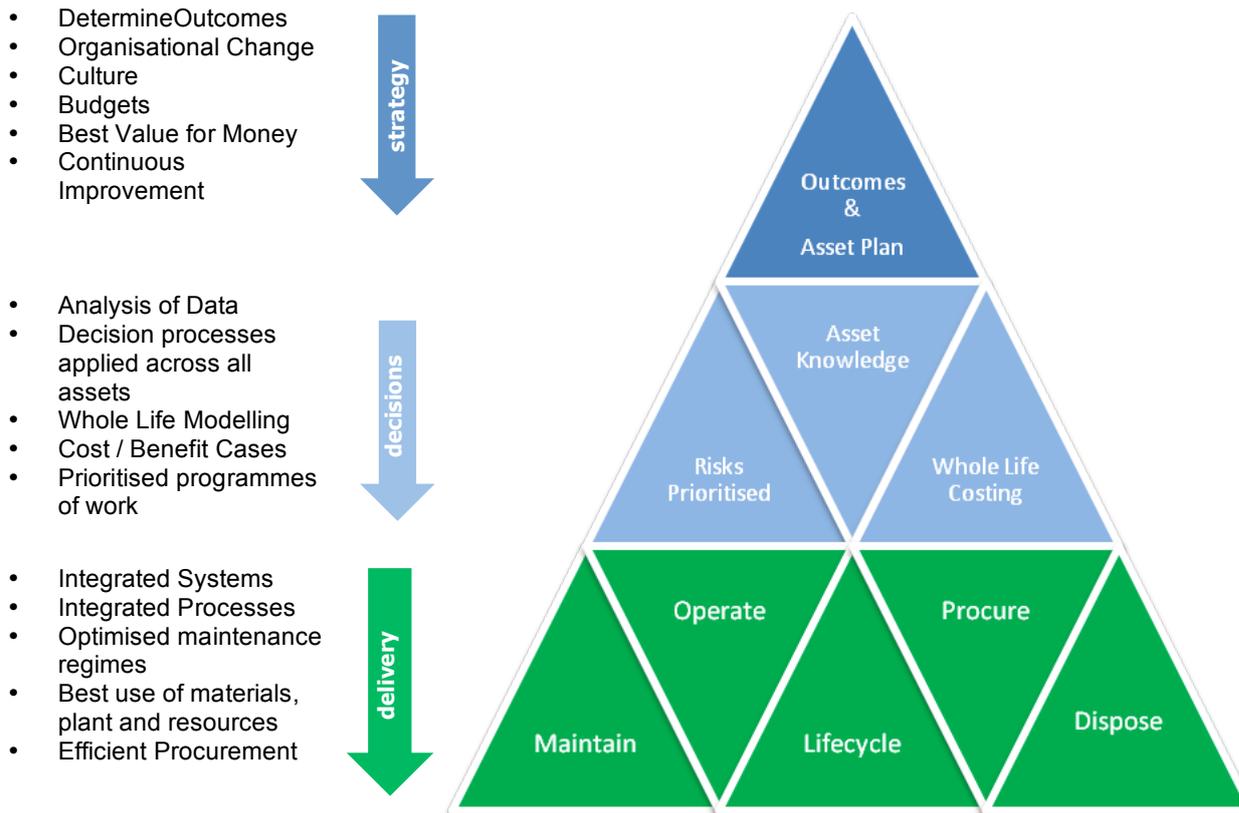


Figure 1: Managed Motorways Asset Management Model

management data, systems and decision tools

- Collaborative working with the RTMC, NTIS and MM Delivery Partners to achieve joint success in achieving outcomes and thus meeting the expected performance.
- Prioritising the quality, consistency and automation of the asset data collected
- Forecasting the optimum spend year-on-year along with a long term investment plan that provides best whole life value as opposed to working back from budgets based on previous performance.
- Leveraging all data on operations such as traffic emissions, vehicle movements using NTIS data and the like to identify initiatives to drive down energy/carbon use. This may be through alternative operational regimes for instance.
- Including constraints such as temporary access requirements in asset management data to ensure that costs of works are fully understood when planning improvements and that visits are not aborted due to unforeseen constraints.

EFFICIENCY DRIVE

The highways industry is now being accelerated towards greater use of asset management techniques to not only deliver efficiencies but to transform the way in which services are being delivered. The HA and many Local Authorities may have to work within increasingly constrained budgets if the case for funds cannot be made based on an outcome driven asset management approach.

It will become increasingly important to provide evidence that value for money is being achieved within agreed budgets and that the business case for future budgets is based on a structured and intelligent assessment of the asset and the outcomes it will deliver.

The managed motorways programme, coupled with the forthcoming introduction of the ASC/RTMC contracts,

provides an opportunity for the industry to work more collaboratively and to support the Highways Agency in managing our motorway assets more efficiently. Of course, there will be obstacles and constraints, but if the industry is aligned then 'work-arounds' can be agreed. If we can harness the asset management approach then we can predict future spend to optimise resources and provide greater visibility of future workload which will also help businesses to reduce costs and plan for future workload helping to avoid the current 'feast or famine' cycles and that has got to be something worth working towards.

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