'Who cares wins' – optimising asset maintenance in AMP6



By MWH Asset Management specialist Simon Jones

Greater asset management challenges in the new operating environment

The new regulatory framework has created a very different operating environment for companies and has laid down even greater challenges for the industry in AMP6. Companies are now focused on delivering outcomes not just outputs, driven by specific performance commitments agreed with their customers. With bills set to be lower than AMP5 and +20% efficiencies being sought, companies have been given a real challenge to deliver these outcomes, maintain standards and deliver a return to investors.

Fundamental to the success of balancing each of these priorities is the approach companies adopt for the operation and maintenance and long-term care of assets. Benchmarking of approaches across the industry carried out by MWH has identified some key elements to consider to drive an optimised approach for asset operation and maintenance.

Effective and efficient stewardship of assets

Under the philosophy of Totex, companies are driven to make better use of their existing assets, rather than building new ones. This will lead to the need for some assets to work to different operational regimes and increased levels of resilience. Therefore maintenance policies and decision-making need to be tailored on risk-based and forward-looking basis.

For effective and efficient stewardship of assets, companies need to be able to answer the five following questions:

- For the assets they operate, what are their current condition and performance?
- How critical are these assets to maintaining levels of service and what is their contribution to delivering outcomes?
- What emerging risks or future uncertainties need to be accommodated in asset operation and maintenance decision-making?
- What is the optimum schedule or approach for repair or replacement of these assets?
- How can we maintain and operate these assets most efficiently in order to manage operation and maintenance expenditure on a least Whole Life Cost basis?

A successful asset management approach provides the ability to plan maintenance activities to maximise the asset life, provide effective service throughout that life and to ensure the right interventions take place, on the right assets, at the right time, at least cost.

Guiding principles for optimising the operation and maintenance of assets

With many of the necessary systems and processes established in previous AMPs, optimisation is reliant on bringing all these components together to make balanced and effective decisions. The

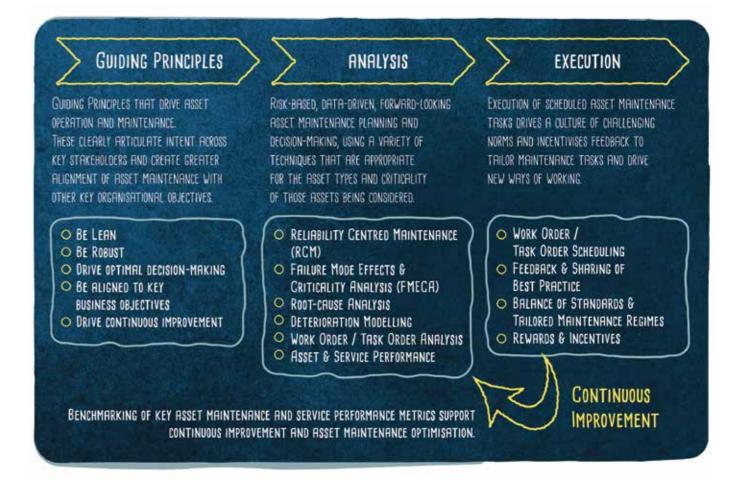
result of benchmarking carried out across the industry has suggested the need for companies to establish a clearer set of guiding principles to drive asset operation and maintenance. These principles should be clearly articulated across key stakeholders and should create greater alignment to the organisation's objectives. The benefits of establishing these principles are:

- Greater engagement between, and buy-in, of asset operations, maintenance and planning, leading to enhanced performance and new ways of working;
- Statement of clearer intent for asset
 maintenance to drive a culture of continuous
 improvement and efficiency; and
- Greater certainty in delivering desired +20% efficiencies, customer-focused outcomes and the realisation of resulting outcome performance incentives.

A company's set of guiding principles for asset maintenance optimisation could include:

- Be Lean: the approach to asset maintenance optimisation needs to be proportionate to assets being scrutinised, minimise disruption to operations and operators, and its value should be easily quantifiable to all.
- Be Robust: the approach should be repeatable, systematic, transparent, auditable and sustainable in the long-term.
- Drive optimal decision-making: the

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approach should ensure that demonstrable balanced decisions are being made on a risk-based, forward-looking basis. It should enable a less reactive and a more proactive approach to asset maintenance.

- Be aligned to key business objectives: the approach to asset maintenance optimisation should also have line-of-sight to other key business objectives – e.g. the delivery of outcomes, business performance and financial metrics.
- Drive continuous improvement: the approach should stimulate and reward operations and maintenance staff to think differently, make time to challenge current practices and identify better ways of working.

Understanding the barriers to optimal operation and maintenance

Benchmarking has also identified some lessons learned and potential barriers to achieving an optimal asset maintenance approach.

"Routine maintenance tasks are failing to be carried out..."

A varying proportion of routine maintenance tasks are not being completed. This is largely due to the balance between the volume of task orders

and resource availability. This can have the effect of greater out-of-hours breakdowns, reducing next-day maintenance resource availability for routine tasks, exacerbating the issue. Analysis of prescribed maintenance tasks and their successful execution can be used to tailor maintenance programmes and scheduling.

"Generic maintenance tasks aren't always applicable..."

The execution of prescribed, generic tasks may not be possible or appropriate for all of the same asset types and operating regimes. This can leave some maintenance incomplete as either not enough time is available to fully carry out the task or the potential disruption to operations unpalatable. Getting maintenance staff to feedback on task orders in terms of whether these are the right tasks to do and better ways to do them can result in much better care for assets and more efficient execution of tasks.

"The more we look the more we need to spend..."

Companies, quite rightly, focus maintenance efforts on their critical assets. This means that improved maintenance planning, root-cause and other analysis techniques are mostly focused on critical assets. This has the tendency to drive up maintenance needs and expenditure. To drive

efficiency, there needs to be a proportionate focus on non-critical assets. Applying the same robust, risk-based, analytical approaches to noncritical assets will identify opportunities to where efficiencies can be realised. This will have the effect of driving focus and resources in the right areas, whilst ensuring overall acceptable levels of risk and service are maintained.

Getting it right can pay big dividends

The regulator is driving companies to seek greater efficiencies in AMP6. To ensure greater certainty in achieving these efficiencies and delivery of their performance commitments to customers, never before has it been more important for the companies to maintain a balanced, or optimised approach between cost and the effectiveness of asset maintenance. Companies need a lean and robust framework for asset maintenance optimisation, which is clearly aligned to demands of other key business objectives. Get this right and those who care for their assets in the right way, will address and win this challenge in AMP6 and beyond.

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