

# Abstract

## Guidelines for asset lifecycle management

The Government has a large number of fixed assets and other tangible assets. The most significant of these are the transport infrastructure, buildings, land areas, water areas and armaments. The assets are meant to provide benefits. Meanwhile, a variety of costs, such as investment, operation, maintenance and repair costs, will arise from an asset during its lifecycle. An asset may also have other effects on the environment or society, for example. Asset lifecycle management aims to influence the benefits and costs arising from assets.

The review examined the instructions different government organisations have on the management of the benefits and costs of assets throughout their lifecycle. The goal was to obtain an overall idea of the instructions and procedures the different government organisations use to manage the benefits and costs during the lifecycle of assets.

On the basis of the review, financial management regulations obligate the organisations to manage Government assets, but the regulations enable the use of a variety of practices. Furthermore, the Act on Public Procurement and Concession Contracts enables taking into account lifecycle costs as a criterion when comparing the overall affordability of acquisitions. The Government requires lifecycle cost calculation from its procurement units in principle, but there are no shared models for the lifecycle cost calculation. Different sectors use different methods of managing the lifecycle of their assets.

## Asset lifecycle management is part of financial planning

According to budget regulations, ministries and agencies are obligated to plan their finances and operations in the long term. According to the State Budget Act, assets must be used in a profitable manner, taking into account the intended use of each asset.

Hence, the regulations also include stipulations on systematic management of finances. According to the budget preparation regulations, the basic calculations on which the spending limit proposals of the different administrative sectors are based must include a realistic assessment of the expenses arising from the decisions in the years to come. Furthermore, permanent savings and increases in expenditure arising from investments must be separately assessed. The explanation and context for an appropriation meant for real investment expenditure must present the social impact of the investment expenditure, the acquisition cost of the investment, and maintenance costs and revenue during the lifecycle of the investment.

Matters of financial or other significance to be addressed in the Government plenary session or falling under the executive powers of the ministries must be processed by the Cabinet Finance Committee. In this connection, it must be determined how the expenditure and revenue from the action will be divided among the years to come.

Thus, it is possible to draw the conclusion, on the basis of the regulations guiding budget planning, that the planning of the benefits and costs during the lifecycle of an asset is part of broader financial planning.

The goals of asset lifecycle management and the operating methods used vary depending on the asset type, which is why the calculation models have been developed separately in each sector. Creating a

calculation model for all asset types would be challenging and not necessarily desirable. Lifecycle cost calculation is important, however, in order to ensure that the assets are used in a profitable manner, as required by section 22 of the State Budget Act.

### Procurement stage has a major role in asset lifecycle management

Lifecycle decisions with long-term effects are made when procurement decisions are made. Public procurement legislation offers the opportunity to take lifecycle costs into account as a criterion when comparing the overall affordability of acquisitions, but does not include any obligation to do so. In the case of the procurement of motor vehicles, public procurement legislation obligates the organisation to take into account the vehicles' environmental and energy impact, however.

Regulations and instructions on public procurement stipulate that the procurement of factors of production must be implemented in the manner that is the most affordable for the state. In most cases, fixed assets are purchased, but renting or leasing them can be justified if a comparison where the lifecycle costs have been taken into account indicates that renting or leasing is the most affordable option.

### Government resolution requires lifecycle cost calculation

A Government resolution on the promotion of sustainable environmental and energy solutions (cleantech solutions) in public procurement aims at reducing the use of energy and materials and mitigating adverse environmental effects during the entire lifecycle of the product, service or building. The resolution requires that all public procurement processes aim at a comprehensive solution that will promote the energy and environmental goals and in which cleantech solutions are utilised in the most cost-effective manner possible. According to the resolution, government procurement units must consider the opportunity to use lifecycle cost calculation and calculation methods that allow the determination of the available means to reduce costs and improve energy efficiency and material efficiency.

### Organisations use procedures and calculation models they deem best in lifecycle management

Government organisations use different good practices in the management of the lifecycle of their assets. The good practices may be operating methods that are widely used in the sector or the organisation's own internal practices.

There is also a series of standards on asset management, SFS-ISO 55000. Based on the review, the standard series is not used in government asset management, however. Some of the government organisations use other standards that support lifecycle management.

There are no general instructions on government lifecycle management or a calculation model that suits all asset types that covers all the costs and benefits during their lifecycle. There is a procurement manual that determines issues to be taken into account as lifecycle costs on the basis of the Act on Public Procurement and Concession Contracts and other issues to be taken into account in the calculation.

Sector-specific instructions focus on the technical aspects of asset management to ensure continuity of the organisation's operations and maintain the value of the assets. The instructions do not clearly indicate

the significance of lifecycle cost calculation as a means of reducing expenditure and adverse environmental effects or boosting energy efficiency and material efficiency.

As a general rule, the organisations have their own lifecycle cost calculation instructions. The goals of lifecycle cost calculation vary, and the calculation methods vary as well. The asset types used by the organisations, their functions and thus also their cost structures are dissimilar. Some of the asset items are subject to a revenue requirement. In the case of some asset items, monetary benefits obtained through the asset item and effectiveness of the asset item are also assessed. Furthermore, the calculation period varies from fifteen years to several decades, depending on the asset type.

Different sectors use different calculation methods for the lifecycle costs and benefits of their asset types. A lifecycle cost calculation template is an important asset lifecycle management tool in the case of some organisations. The Public Procurement Advisory Unit recommends that lifecycle cost calculation be used in connection with acquisitions.