Re-establishing Defence Capabilities. Quickly – and wisely.

For several decades after the (supposed) end of the Cold War, defence budgets shrank. Political priorities shifted and governments moved funds into other pots. The peace dividend paid for many other public benefits. However, things have changed – and rapidly. The Russian invasion of Ukraine has forced governments to reconsider their defence planning and expenditure. Are you ready?

In this article, we consider the impact of these changes in this evolving landscape, from the perspective of the challenges of ensuring cost effectiveness, operational capability, and value – in the context of the key discipline Life Cycle Management (LCM).

Short- and long-term priorities

In many countries, focus is now firmly on re-establishing defence capabilities. And, consequently, defence budgets are or will be increased.

Short term, additional funding is needed to quickly restore readiness and operational capability of existing defence systems. Focus will lie on restoring equipment availability, e.g., through maintenance campaigns or supportrelated investments, and improving security of supply of critical commodities such as fuel and ammunition. Supply of personnel and organisational capabilities are also critical factors that must be aligned.

Long term, additional funding is needed to introduce new capabilities to guard against future threats and a more volatile landscape. But also, to sustain capabilities over time and provide sufficient budgets for operations and support. Lack of funding for the latter will quickly degrade operational capability and degrade the value obtained from investments made.

Balancing priorities

Admittedly, the task facing countries, governments and defence forces is challenging. How are budgets to be allocated to yield maximum effect or value, short-term or long-term? This question must be adequately addressed to ensure cost-effective use of the taxpayers' money and to ensure required level of defence capability is provided. The capability and output of the defence system is again put to the test and ill-advised decisions may prove costly.

Irrespective of time frame, cost-effectiveness is the central balance scale to use. What are the total cost implications (immediate and required over time) associated with a decision and what is the foreseen effect on defence capability (immediate and over time)? A through-life or lifecycle perspective must be taken, and Life Cycle Management guide and influence the decisionmaking process.

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- • **II** The life-cycle perspective
- needs to be addressed, also for
- actions primarily aimed at quickly
- improving or restoring defence
- · capability. //

Managing the uncertain future

But can we really take control of the life cycle cost and performance when the future is uncertain? We certainly can, and this is another integral element of Life Cycle Management. Modelling potential scenarios and futures, the robustness of the decisions and sensitivity to changing preconditions can be assessed. What and how well can our defence capabilities deliver under specific circumstances? Modelling is the only option at hand when field test and experience data is hopefully scarce. To use uncertainty regarding the future as an excuse to ignore the life-cycle perspective is of course futile. Strategic, high-cost decisions mandate thorough underpinning, based on the best information and analysis capability available. The opportunity to gradually modify and tune the capability to dramatically improve cost and/or performance is normally limited. We are bound by the strategic decisions once taken.

With this said, we must do our best. This is at the heart of (strategic) product management in the sustainment phase, to continually scrutinize cost and performance of defence systems; this to remove or at least mitigate limitations or cost drivers. Also, new preconditions or updated scenarios must be accounted for.

Unlocking analysis-driven LCM

Opus Suite is a modular platform that truly unlocks analysis-driven LCM within your organisation. It contains, e.g.,

- Tailorable integration with key data sources to ensure effective and reliable data supply
- Comprehensive scenario modelling to accurately describe, e.g., preconditions, operational concepts, and requirements
- Flexible cost modelling to ensure complete and relevant cost picture
- Powerful analysis and simulation for thorough and reliable cost and effectiveness assessment
- Advanced and proven optimisation algorithms to generate optimal (cost-effective) recommendations or decisions
- Tailorable result presentation for effective communication of key results and conclusions

These elements together provide the basis for effective and advanced LCM-related analyses, analyses essential for well-informed program/ Visit www.systecongroup.com to find out more on how Systecon and Opus Suite can help predict and assess the impact of your decisions on performance and cost, during the system's entire life cycle.

product management, in any phase and irrespective of program complexity. Of course, the more complex the program, the more urgent the need for the capabilities provided by Opus Suite.

Partner with Systecon

Although the task at hand is challenging, help is available. Systecon has more than 50 years' experience in assisting defence forces in LCM, mastering the required data analysis, and in providing and using the world-leading Opus Suite analysis tools required for the task. If you'd like to know more, take a course to learn about LCM in depth, or meet our team, just let us know.



Dr. Patrik Alfredsson Senior Partner, Systecon

Patrik Alfredsson has over 30 years of experience in the defense and transport industries and analysis driven Life Cycle Management. During his years with Systecon, he has held several management positions within the company and worked with various defense agencies and ministries globally.