

# Supportability

The key element in through-life management of an asset or service is the ability to provide effective maintenance at the minimum cost whilst maximising the availability of the system, ensuring that the user can operate the equipment to the required performance on demand.

The cost of in-service support of a capital asset is generally significantly higher than the cost of its procurement. Support cost is a major factor in ownership decisions and hence needs to be effectively managed.

## SUPPORT MANAGEMENT

We adopt a risk based, holistic approach to supportability issues on projects throughout their lifecycle. In applying our pragmatic approach to reducing the cost of ownership for our clients, we employ unrivalled engineering design and analysis skills.

Our key activities in supportability management include:

- ▶ Support Planning and Procurement Strategy Development
- ▶ Support Tender Development and Assessment
- ▶ Supportability Programme Management
- ▶ Reliability and Maintainability (R&M) Programme Management
- ▶ Supportability Risk Assessments and Reviews
- ▶ Maintenance Planning and Supportability Analyses
- ▶ Training Needs Analysis
- ▶ Whole Life Cost Analysis
- ▶ Disposal Planning

## RELIABILITY AND MAINTAINABILITY

Reliability and Maintainability (R&M) are two key design considerations that form a part of the design and manufacture of any equipment, and dictate the overall availability of the in-service product. In procurement programmes R&M is considered as equal in importance to time, cost and performance, and should therefore be addressed as an integral part of any design trade-off. We specialise in providing R&M engineering services that include:

- ▶ R&M Planning of procurement strategies and preparation of tender documentation
- ▶ Identification of R&M risks and development of pragmatic R&M strategies to reduce R&M related risks



- ▶ Development of R&M cases providing progressive assurance that the R&M requirements are being addressed
- ▶ R&M assessments on equipment using techniques such as modelling, prediction, failure analysis, and reliability centred maintenance
- ▶ Planning and monitoring of R&M testing, including growth and qualification
- ▶ R&M and design improvement programmes to address key design issues and technical problem solving

## APPLICATIONS

We are experienced in developing support solutions for systems in a wide variety of commercial and military environments, some of which are summarised below:

- ▶ Land systems including armoured vehicles, logistic vehicles, weapon and gun systems, bridging equipment, communications systems, and surveillance equipment
- ▶ Naval and maritime such as offshore rescue craft, marine engines, submarine weapon systems, sonar systems, ship platform systems, and handling gear
- ▶ Aerospace including missile launchers, aircraft undercarriages, avionics systems, mission data systems, helicopter systems, satellite components, training systems and flight simulators
- ▶ Transport such as railway rolling stock, passenger cars and HGV's, braking systems, traffic management and signalling systems
- ▶ Industrial including packaging machinery, hydraulics, mechanical handling equipment, and process plant

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