

## Q. Are you Struggling with your Equipment Repair Strategy? A. EDCAS - TFD's Design Optimization & Level of Repair Analysis (LORA) Tool

Are you struggling with:

- Costing the best design for your new equipment?
- Defining the best level of repair strategy for your support solution?
- Understanding the impact on supportability and cost of part and configuration design trade-off?
- Understanding the logistics performance of design alternatives?

STOP Struggling! Using TFD Group's *EDCAS* software product will solve these problems

The Equipment Designers' Cost Analysis System (*EDCAS*) is an analytical model used to identify and quantify cost-effective solutions to a number of Systems Engineering problems. It supports data collection optimization of Engineering Design, Reliability Engineering, Configuration management and the ILS disciplines of Life-Cycle Costing (LCC), Level of Repair Analysis (LORA) and spare part scaling.

**EDCAS** calculates support resource life-cycle costs, facilitates sensitivity analyses and configuration and part trade-off studies. **EDCAS** aims to influence system design both of physical equipments and the support elements required to sustain them and thus reduce costs.

**EDCAS** holds data about a system, its constituent components, the resources (parts, tools and skills) required for its maintenance, together with details of its operating environment.

**EDCAS** is used to determine the level of repair policies for the system and its major components and provide analytical reports quantifying (in LCC

terms) key cost drivers. The detailed life cycle cost output provides the initial, operating, support and disposal costs for each evaluated option. In addition to numerical reports, various graphs and charts can be generated showing the extent and proportion of LCC for each cost driver **EDCAS** can subsequently be used to undertake sensitivity, configuration / part trade-offs and other analyses to improve design, save cost and determine the impact of change.

All data is held in a relational database and can be imported or exported in multiple formats including spreadsheets.



Image Courtesy of Eurofighter Jagdflugzeug GmBH

**EDCAS** has been mandated as the tool for life cycle support cost and level of repair analysis on many current systems including:

Eurofighter(Typhoon), Leopard II, EFV (formerly AAAV),Stryker, LPD 17 and Gepard ADS. It has also been widely used with many MoD and DoD military installations. EDCAS has also been awarded a UK MoD Verification and Validation (V&V) certificate.

**EDCAS** is part of the TFD product suite. A portfolio of Strategic and Tactical products combining to provide a complete supportability solution, as shown in the TFD Software Architecture figure overleaf:

## TFD Software Architecture



• **EDCAS** - the international standard for frontend cost and level of repair analysis.

TOOLS FOR DECISION

- VMetric to plan competitively low-cost spares lists, identify inadequate or expensive spares recommendations and be sure of achieving target fill rate or availability levels.
- **Tempo** accommodates changes over time in spares optimization.
- SCO for tactical Support Chain Optimization.
- **MAAP** a deterministic, event-based Total Ownership Cost model to provide the most reliable cost forecasts available and accurate resource requirements by time period and realworld location.
- TFD Data Vault a common source database, optimized for use with analytical processes, to support both TFD products and those of other providers.

This unique and comprehensive suite of software tools, underpinned by the common source data vault, provide the full capability to support all your Integrated Logistics Support (ILS) supportability needs; either as software installations or through a service arrangement with TFD.

## TFD: The Trusted Name in Logistics Decision Support

## STILL Struggling?