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Member of PGSI Group

**EDCAS®**

## Equipment Designer's Cost Analysis System

Authorised Distributor of TFD Software Suite



**EDCAS®**

[Equipment Designers Cost Analysis System]

Cost-effectiveness is a vital issue for the Defence support industry and companies involved in the design and development of weapons and product systems. Program Managers and Engineers are faced with choices between competing systems with sometimes different configurations for whom support arrangements are paramount. Whether the system in question is a frigate, an aircraft, a tank, or radar installation, or any other product system (or sub-set thereof), the cost-effectiveness of design and support hinges on the appropriate accuracy and timelessness of logistic and engineering analysis.

EDCAS®, the Equipment Designer's Cost Analysis System, delivers the flexibility, accuracy and speed you need to keep design and development on track and optimise the support concept or structure by means of a scientifically verified Level of Repair Analysis (LORA) considering cost drivers comprised of different resources and types.

EDCAS® is sensitive to the cost implications of all kinds of hardware design decisions, including both hardware and manpower aspects.

The wide spread acceptance of Defence support industry around the world is testimony to the realism of EDCAS® estimates. EDCAS® was the mandated tool for life cycle cost and level of repair analysis on many leading and current international weapons systems.

Because the model is defined in terms of real economic costs and marginal cost definitions, decisions will benefit from this knowledge.

EDCAS® is sensitive to the cost implications of all kinds of hardware design decision, including both hardware and manpower aspects. Because the model is defined in terms of real economic costs and marginal cost definition, decision benefit from full knowledge or real costs and real savings.

### Contact Details

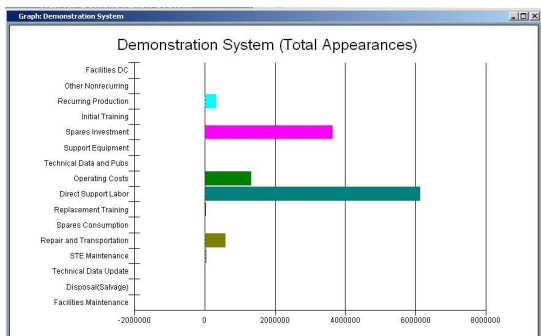
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By giving almost immediate feedback on the life support costs and logistic performance of design alternatives, EDCAS® brings logistic concerns insight to the system engineering decision loop. With thousands of government and industry users world wide, EDCAS® has become the sought-after international standard for front-end analysis.

It is the decision support tool of choice for systems engineers and logistic analysts seeking to identify cost-effective design and support strategies. This is especially applicable in the concept and development phases of the system life cycle. It also determines the relative costs of available options in the acquisition and in-service phases.



For more information, visit us at [www.optilog.co.za](http://www.optilog.co.za) or [www.tfda.co.za](http://www.tfda.co.za)

EDCAS® is a central component of the TFD Suite of analytical models. It's database is designed to share data with MAAP® VMetric® and Tempo®. The applications can be run in sequence, the results from one serving as inputs to another.

TFD's comprehensive range of data interface tools enables an analyst to assemble an EDCAS® input data set quickly and easily. Information can be obtained from many sources such as LSAR (MIL-STD 1388-2B and DEF-STAN 00-60) data exchange files, corporate databases, CAD systems, third party software applications such as reliability systems or spreadsheets.

As a complement to its unsurpassed decision support software tools to the TFD Group and authorized support network also offers high-value analytical services. Analysts have a record of distinguished achievement relevant fields.

### Features

- ⇒ Intuitive graphical interface tied to TFD Database.
- ⇒ Common data usage with all other TFD applications.
- ⇒ Standard data interfaces and spreadsheet import.
- ⇒ 4-Indenture, n-Echelon engineering model with different operating site attributes.
- ⇒ Total ownership cost including all acquisitions, operation, support and disposal costs.
- ⇒ Multi-run capability for:
  - Sensitivity analysis.
  - Trade-off analysis for configuration & other component /system attributes.

⇒ User-definable and pre-defined outputs:

- Single page system summary.
- Level of Repair detail page for every assembly.
- System spares summary by site.
- Export output reports Excel.

⇒ Fast run-times.

⇒ Quasi-optimising spares algorithm [responds correctly to unit price differences].

⇒ Learning curve for production cost estimating.

EDCAS® is a Life Cycle Cost (LCC) and Level Of Repair (LOR) model whose simple interface enables analysts to quickly portray and compare alternative hardware design or acquisition options. It can be used for any hardware decision with downstream or life cycle economic implications.

TFD GROUP		EDCAS Stock Summary					
TOOLS FOR DECISION							
Item Name: Demonstration System							
Reference Number:							
Name	%Of LCC	OPEI	Repair Policy	Total	Depot	Inter	Total (Sites)
Drive Train	83.47	1	Organization	10051	0	0	10051
Transmission	28.12	2	Depot	32000	0	0	32000
Pump Assembly	0.03	1	Organization	4	0	0	4
Engine	0.37	1	Organization	61	0	0	61
Turbo	0.05	1	Organization	14	0	0	14
Starter	0.02	3	Contractor	61	0	0	61
Alternator	0.01	1	Organization	41	0	0	41
Pump Unit	0.02	2	Contractor	175	0	0	175
Cylinder	0.04	2	Contractor	124	0	0	124

Input File: C:\Program Files\Tools for Decision\EDCAS 3\Data\Tinus Oelotse\TFDDemo.tfd  
 Output File: LastRun-Tinus Oelotse.odt  
 Project Name: Demo Project  
 Analyst: R Butler  
 Run Date/Time: Friday, 22 May 2009 09:20

The screenshot displays the EDCAS software interface. The main window is titled 'EDCAS' and contains a menu bar (File, Edit, Tools, Window, Help) and a toolbar with icons for Resources, Systems, Sites/Units, Environment, Scenarios, Run, and Reports. Below the toolbar is the 'Systems Manager' window, which shows a tree view of systems. The 'Structure Manager' window is open, displaying a table of system components. The 'Resource Manager' window is also open, showing a table of resources.

Structure Name	QPA	MEU	MEs	NSN	Name	Ref Num	CAGE	Part Group Type	Description
Aircraft UE1 - AE1	...	...	...	...	Aircraft UE1 - AE1	System 1 UE1 -	YYYY		aircraft description
Airframe Sub-Sys...	1	...	...	...	Airframe Sub-Sy...	End item 6	YYYY	Equipment	
Avionics Sub-Sys...	1	...	...	...	Avionics Sub-Sy...	End item 1	YYYY		
CCA, Power Su...	1	...	...	...	CCA, Power Sup...	Pt No 2	YYYY		
Communications S...	1	...	...	...	Communications...	End item 3	YYYY		
Electrical Sub-Sy...	1	...	...	...	Electrical Sub-Sy...	End item 7	YYYY		
Engine Sub-System	2	...	...	...	Engine Sub-Syst...	Mod 2	YYYY		
Flight Control Sub...	1	...	...	...	Flight Control Su...	End item 2	YYYY		
Digital Flight Co...	1	...	...	...	Digital Flight Con...	Pt No 5	FCSC1		
CCA, Power...	3	...	...	...	CCA, Power Sup...	Pt No 2	YYYY		
Flight Contr...	1	...	...	...	Flight Control So...	SW 1	FCSC1		
Leading Edge Sub...	1	...	...	...	Leading Edge Sub...	End item 5	YYYY		