

Case Studies: How ICT is helping to deliver the low carbon economy

Title: SIMLOG - Optimising system emissions



Company: Apsys - EADS Defence & Security Systems

Summary

Parties involved: APSYS
Sector/s involved: ILS Software development
Outcome: New software tool

Key Objectives

To optimise a system against its carbon emission and to integrate the cost of carbon emissions in its Life Cycle Cost assessment.

Description

Over the last 15 years, APSYS has been developing an Integrated Logistic Support (ILS) software tool: SIMLOG. The main functions of SIMLOG are maintenance optimisation and life cycle cost (LCC) assessment.

APSYS has developed a new module in SIMLOG which calculates the carbon emissions of a system and its maintenance. So, users are now able to know which architecture and maintenance concept has the lowest carbon footprint and optimise their system against this parameter. Furthermore, with the percentage of carbon emission they want to offset and the cost of this solution per tonne, the cost of their carbon emissions will be taken in account in the Life Cycle Cost assessment.

Thus with SIMLOG and its CO2 module, it will be possible to assess the carbon footprint and its cost during the design of a system.

Environmental Benefits

The cost of modifying a system after its entry in service is higher than doing the same modification during the design phase. So SIMLOG allows organisations to design greener systems and reduce costs at the same time.

Furthermore, by optimising the maintenance concept against CO2 emissions, SIMLOG will optimise the position of stock and plants and reduce travel.

Scope for further work identified

SIMLOG can be customised to specific needs.