

### Background

This case study provides an example of a Supportability programme with an unusual and different emphasis.

Tubed Artillery Conventional Ammunition System (TACAS) was a programme addressing the requirement for the provision of improved operational capabilities and Support footprint for Tubed Artillery. It comprised of a number of sub-systems; each required to deliver a certain capability.

TACAS was an overarching project whose aim was to rationalise and co-ordinate the identification and selection of potential solutions in the above areas.

### Aspire Involvement

The technical requirements for such a programme are both diverse and comprehensive and as such are ideally suited to the Aspire teaming and collaboration approach.

In this instance Aspire provided the Integrated Logistic Support (ILS) Management and Engineering team, and were an integral part of the Joint Integrated Project Team (JIPT) established by the UK Ministry of Defence (MoD) and Royal Ordnance.

The programme was in the early Assessment Phase and Aspire was responsible for:

- ❑ Development of an Assessment Phase evaluation methodology
- ❑ Identification of ILS and Support related Requirements from the User Requirements Document (URD) and translation into System Requirements Document (SRD) Requirements within a DOORs environment
- ❑ General support on related areas such as Safety and Reliability

### Aspire Approach

One of the prime aims of the Project Management activity was to identify and **mitigate risks**. These risks could have taken several forms and it was important to identify and prioritise those risks, not only from a performance viewpoint, but also from the viewpoint of potential burdens in the form of **Whole Life Costs** and **Through Life Management** issues.



The earlier that these potential risks are identified; the less onerous is the task of mitigating against the risk. This mitigation may be by redesign of the Mission System or Support System or it may be by consideration of the risks and the development of an appropriate combination of responses which together address and mitigate the risk. In any event the earlier the better!

It was essential that the activities that were undertaken to identify and mitigate against these risks were of a type and at a level which was both relevant and appropriate to the Lifecycle Phase of the programme. To this end a Systems Engineering based approach utilising **tailored analyses** in an integrated and coherent manner was utilised and was entirely appropriate and consistent with the overall goal of **optimising Performance** and Risk.

# Aspire

Aspires' tailored Systems Engineering approach argues against the outdated opinion that Support issues do not need to be considered until later in the Lifecycle.

We have relevant and practical experience of both the difficulties and the Project rewards that are achieved by a proactive involvement in addressing Support and Through Life Management issues during the early stages of a Projects Lifecycle.

This project experience ranges from the identification and transformation of User Requirements Definition (URD) requirements through System Requirement Definition (SRD) and into Invitation to Tenders (ITT's) and Statement of Works (SoWs), to actively influencing design and management decisions during the early Lifecycle Phases by the judicious application of Management and Analytical processes and techniques.

The evolutionary development approach, from Assessment to potential Production standard, meant that it was essential that sufficient effort was expended during the early phases of the project to minimise potential design and support related risks which may only manifest themselves in the later stages (development and production) of the project.

The cost of this effort was not significant in terms of overall Project costs, but its impact certainly far outweighed its cost.



## Programme Scope

The scope of the Supportability programme during the Assessment Phase was therefore to:

- ❑ Identify appropriate and realistic Requirements by effective Requirements Management
- ❑ Address major Supportability related issues at an early stage of the Hardware solution development

## Results

Analyses performed were sufficiently detailed to identify potential problems and solutions but at a level commensurate with the phase of the project.

Particular attention was directed towards those issues which may have resulted in potential problems being inbuilt to the conceptual baseline that was being developed for the production system.

**For More Information** about our services please **CONTACT US**. We will arrange for a Subject-Matter-Expert to talk to you.

Aspire Scandinavian Office:  
Boastigen 6  
S-691 33 Karlskoga  
SWEDEN.  
Tel: +46 586 817 22  
Fax: +46 586 817 29  
Email: [info@aspirecl.com](mailto:info@aspirecl.com)  
Website: [www.aspirecl.com](http://www.aspirecl.com)

