

A whole force approach

Reducing outages on critical communications capabilities

Facts:

- **50 on-site personnel**
- **Whole Force Approach**
- **21 years of continuous delivery**
- **24/7 operations**
- **12 safety reports**
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A legacy system

The Joint Service Signals Organisation (JSSO) needed to reduce system outages and find a more efficient way of maintaining and operating a legacy communications capability in Europe.

Inefficient third-party maintenance, ageing equipment requiring upgrades, a high knowledge requirement and risk profile, and regular rotation of military personnel were all resulting in significant periods of downtime.

The whole picture

Taking a 'system of systems' approach to this legacy capability, CDS Defence & Security worked to ensure a complete solution to the JSSO's problems.

1. **On-site team:** It was clear that the maintenance and operation of the equipment would benefit from a more consistent team who knew the system inside and out. The Whole Force Approach was enacted, placing 50 CDS DS members alongside 100 military roles to improve the continuity of operations. With part of the team offering more consistency, and subject matter experts placed to provide mentoring and training, performance was improved and the training burden reduced.
2. **Annual maintenance:** We tackled an inefficient maintenance schedule previously spread over 12 months by consolidating the requirements of 12 companies and 200 engineers into a six-week intensive period. By considering the system as a whole and managing a coordinated work schedule, we allowed each contractor to get on with what they needed to do, avoiding unnecessary downtime, additional cost or delays.
3. **Safety and environmental management:** The associated risks were managed by working closely with the whole team to develop 12 equipment safety reports. These reports covered everything from working at height and radiation hazards, to the functional safety of equipment and software.
4. **Training:** We set up a programme of training to ensure the team was well prepared to operate the equipment effectively and safely. This consisted of courses and on the job training, including each suppliers' equipment-specific content within the Defence Systems Approach to Training principles.
5. **Future proofing:** The system is now undergoing an upgrade to replace much of the legacy equipment. Taking on the role of Site Integration Design Authority, we are making good use of our 21 years of experience on this project to effectively coordinate the upgrade. With over 12 equipment manufacturers to involve, our work will cover everything from writing manuals to checking the security documentation and allocating plugs to integrating software.

Looking to the future

The Whole Force Approach realises the significant value that can be achieved by blending full-time military personnel with reserve forces, civil servants and defence industry contractors. Not just have we effectively embedded within the military system, but we have also achieved success with the co-ordination and collaboration between the sites' suppliers to develop a more effective maintenance schedule.

Over the past 21 years, we have:

- Reduced outages
- Increased operational availability
- Reduced the cost of procurement
- Improved equipment effectiveness

Squadron Leader James Mathew, Headquarters Joint CEMA Group

“CDS DS provide our project with Subject Matter Expertise, project management services and specialist training. The knowledge and experience they provide often goes above and beyond what we expect from them. They are a key part/member of the project and without them we would be at a loss.”