

CEDISC

Centre of Excellence in Defence and Industry Systems Capability



Our Vision

Enable, Grow & Transform:

**Systems Capability of
Defence and Industry**

Our Mission

- **To grow Australian Industry capacity to be internationally competitive in systems capabilities**
- **To achieve Defence outcomes through the application of world-class systems practice**

To address the challenges outlined by the Defence Electronic Systems Sector Strategic Plan in delivering the ADF's future warfighting capabilities, Australian industry needs to have access to sources of expertise in systems development, in particular:

- Open architectures
- Systems integration, and
- Systems capability maturity

To meet these challenges and facilitate the rapid advancement of Australian defence industry skills in systems engineering, the South Australian Government in collaboration with DSTO and the University of South Australia, has established and funded the Centre of Excellence in Defence and Industry Systems Capability, **CEDISC**.

CEDISC's charter is to enhance Australian industry's capability in systems integration and systems capability maturity accreditation. The Centre will work collaboratively with Defence, DSTO, Industry and the University of South Australia in providing specific capabilities, training and services in systems and software engineering.

www.cedisc.com

The **CEDISC** areas of focus are domains of interaction that enable DSTO, Industry and the University of South Australia to form collaborative research incubators within **CEDISC** to address critical issues including those detailed below:

Processes

- Integration of legacy and COTS (commercial-off-the shelf) systems
- Systems integration performance modelling, simulation and estimation
- Software and system performance modelling and estimation

Engineering

- Architectural design
- Software and system engineering methodologies
- Design Validation

Service Provision

CEDISC will provide services via research contracts and consultancies for Systems Processes, Integration and Engineering areas that include:

- Independent verification & validation
- Advice, coaching and mentoring
- Capability maturity profiling, and
- Design consultation

Knowledge Base Development

CEDISC will develop expert knowledge in Systems Processes, Integration and Engineering areas by engaging in:

- Research
- International linkages
- Standards and statistics tracking, and
- Development of a systems capability, expertise and maturity database.

Centre of Expertise in Systems Integration

Networked Military Capability

Tactical information exchange
 NCW common user facility
 NCW capability demonstrators
 Network performance and behaviour
 M&S for Socio-technical systems

Systems Science & Technology

Systems and software engineering
 Complex adaptive systems
 Systems safety
 Tools and techniques
 Mathematical modelling and simulation
 Technical skills development

Military Systems Integration

Mission systems
 Combat systems
 Embedded software
 Open architectures
 Technical risk analysis

Enable, Grow & Transform Defence and Industry

Education and training
 Tools and knowledge repositories
 Business transformation
 Process improvement
 Technical skills improvement
 Professional re-skilling

Industry Upskilling

CEDISC will provide skills development in Systems Processes, Integration and Engineering areas that include:

- Graduate and post-graduate courses and certification in software engineering, systems engineering and systems integration
- Industry-specific training courses
- Tailored capability maturity and process improvement courses

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