

## Our Experience

### Clients

Cogito Group consultants have primarily worked for the Australian Defence Organisation (ADO) and intelligence agencies, both domestically and overseas. Cogito Group have a proven track record delivering the Australia's largest and most geographically dispersed smartcard implementation for the ADO, issuing over 2 million soft and hard token certificates across the project's lifetime.

This implementation has some of the harshest environmental and industrial conditions that can be imagined, including hot, cold, humid, dusty, land, and maritime conditions, on top of being heavily used. This rollout not only required distributed registration and use across Australia, but also encompassed deployments overseas. These services were also required to secure high level access to trophy systems containing highly classified information.

### Card Management Systems

Cogito Group designed, built, tested, and sustains three complete Card Management Systems for the ADO. Cogito Group designed and built these Card Management Systems to:

- Support personnel located internationally with registration points located in major capital cities across Australia, allowing the 120,000+ personnel to have close access to a registration point to receive a smartcard.
- Issue smartcards from a central location using batch processing to reduce operational costs and complexity, and to maintain higher security over card stock and card keys.
- Issue smartcards with both PACS and LACS capabilities.
- Issue smartcards with certificates that are Gatekeeper (AGIMO) certified.
- Support multiple smartcard types.
- Be deployed on a classified network for issuance of smartcards used to access Australia's Allies ICT systems.

The original implementation continues to expand. The initial 3,000 licenses are planned to increase and roll out to all administrators on multiple networks is now being completed.

## Sustainment

Cogito Group have provided continual sustainment of these CMS solutions for the past five years and are contracted for another three years. This sustainment work includes:

- Resolution of issues and bugs that arise with the products.
- Identification and implementation of enhancements to the processes and products.
- Training to standard users, operators, and system administrators.
- Engagement with groups internal to ADO to help enable more capability for Smartcards.
- Operation, engineering, and maintenance support.

Cogito Group provide other software services that include design, development, testing, build, deployment, implementation, data migration, integration training, maintenance, configuration, and support.

## Security Management

### Public Key infrastructure (PKI)

Cogito Group provided the installation, integration, and testing services to a new facility to allow the joining and access of other networks to the ADO's environment at the Highly Protected network level.

### Multi-Factor Authentication (MFA)

Cogito Group provided an MFA end-to-end solution. This required new services and systems to be installed for the pass-through of information and inspection of that information without interrupting the dataflow. Cogito Group installed and configured the infrastructure used to achieve this.

### Digital Signing

Cogito Group have delivered new approval processes to migrate manual processes to ITIL compliant software platforms. In addition, Cogito have PKI-enabled the organisation, paving the way for approval processes to become digitised with digital signing instead of wet-ink signatures, cutting down manual document handling and physical document management costs, creating a paperless organisation.

## Security Strategy

### Gatekeeper Accredited CA

Cogito Group were contracted by the ADO to assist with the development of policy and documentation in their GateKeeper Accreditation, through the Australian Government Information Management Office (AGIMO – Department of Finance).

Cogito Group is in the process of gaining Gatekeeper Accreditation, which requires compliance with the ISM and PSPF. Cogito Group has developed and submitted the requisite strategy to be employed to maintain the integrity and confidentiality required in a solution that provides those services to other systems. Cogito Group already has in place the plans and architectures to meet the ISM and PSPF requirements to the level of Highly Protected.

### Cross Certification

As part of the interoperability between ADO and its allies, Cogito Group have been integral in development of and negotiation of PKI interoperability agreements between the United States Department of Defence (US DoD) and the ADO high and low networks. Cogito Group have ensured that futureproofing is maintained with the solutions, having been involved in the strategic planning, including the development and evaluation of the required solution and research and analysis of implementation methods and best practices.

Cogito Group provided key planning documentation and advice for management and governance frameworks such as ACP 185.

## Security Management

### Single Information Environment

Cogito Group is currently implementing the Single Information Environment (SIE), a next-generation technology domain, allowing its client to move IT infrastructure to more cost-effective virtual platforms. Cogito Group were engaged to provide replicas of the Corporate Directory, Public Key Infrastructure and Smartcard Management System to enable integration and testing of these existing components against the new SIE domain and its differing architecture and management infrastructure.

Cogito Group are engaged to provide key integration between key network resources, platforms, and software between the old and new solutions. Both networks are required to interact with one another until the new solution reaches final operational capability.

## Security Solutions

### HSM Upgrade

Cogito Group delivered the upgrade of all ADO Hardware Security Modules (HSMs).

### Web-Based Solutions

Cogito Group have delivered numerous web-based systems to the ADO, including Smartcard Management Systems, PKI Management Portals, and General Information Sites. Cogito Group staff possess strong skills in various web platforms, including JAVA, ASP.NET, Node.js, and Django.

Cogito Group possess staff with solid technical understandings of XML and XBRL (including XBRL Taxonomies), UI design and development, usability and accessibility testing, user traffic targeting, and optimisation.

### Integration Specialists

Cogito Group are experienced system integrators and specialise in bringing component subsystems into a holistic interface. We focus on bridging the common operational gaps faced in the integration of digital security technology. Our consultants have specialist knowledge in data synchronisation and manipulation between disparate systems.

Cogito Group were engaged by the Australian Defence Aircraft Maintenance Environment (AME) to provide PKI enablement of WIFI-enabled devices to secure communications channels. Cogito Group successfully delivered this capability, integrating both the AME's enrolment application architecture with the existing PKI application architecture. This allowed both group's architectural needs to be maintained with little disruption or intervention needed.

Cogito Group ensured that the business logic, delivery channels, and data management contained within the device credential issuance process would be kept as the standard processes provided by the Operating Systems used, thus providing assurance that future enhancements would cause only minor integration issues.

Cogito Group developed, as part of the AME work, a template and delivery channels for provisioning WIFI into separate domains that has now been used numerous other times within the ADO.

As part of the wider use of PKI, Cogito Group staff integrated auto-enrolment of digital certificates across the Protected and Secret Networks. This rollout was extended to include soft certificates for all users within these networks. This system has now been running successfully for several years and has been extended to other smaller connected networks such as the Defence Science and Technology Organisation's network.

To date, over two million digital certificates have been issued from this facility. Cogito Group has been instrumental not only in the implementation of this solution, but also the use and management of these certificates over time. The certificates for this service have been adopted for such diverse uses as digitally signing documents for personnel appraisals, and procurement approvals as well as the signing of emails.

## About Cogito Group

Cogito Group is an award-winning, Australian owned and operated ICT company, specialising in authentication, cloud security, identity management and data protection. Cogito Group protect the authentication methods used to access information through the use of Identity and other security technologies. Cogito Group protect data not only from unauthorised access and disclosure, but also from being altered by an unauthorised third party or a trusted insider with malicious intent. This assists in the detection and prevention of fraud or other malicious activities by third parties or trusted insiders.