Australian Government

FACT SHEET

Trusted Information Sharing Network for Critical Infrastructure Protection

Critical Infrastructure Protection Modelling and Analysis Program

Overview

The CIPMA Program is a key component of the Australian Government's efforts to enhance the protection of our critical infrastructure, and strengthen the resilience of our economy and society. CIPMA examines the relationships and dependencies between critical infrastructure systems, and shows how a failure in one sector can greatly affect the operations of critical infrastructure in other sectors. This information is assisting the development and direction of government policy in national security and critical infrastructure protection (CIP), and helping owners and operators to better protect their critical infrastructure. The three priority sectors currently engaged in the CIPMA Program are banking and finance, communications, and energy. In September 2006, the Attorney-General announced that water would become the fourth sector to be covered by CIPMA. Work has commenced on this sector.

The Attorney-General's Department (AGD) is managing the CIPMA Program. AGD is working closely with Geoscience Australia and the CSIRO to build the capability.

The CIPMA Program is a major national security initiative and supports the work of the Trusted Information Sharing Network for Critical Infrastructure Protection (TISN).

Goals of the CIPMA Program

The primary goal of CIPMA is to strengthen national security and better protect our critical infrastructure. It does this through a computer based capability which uses a vast array of data and information from a range of sources (including the owners and operators of critical infrastructure) to model and simulate the behaviour and dependency relationships of critical infrastructure. The capability includes a series of 'impact models' to analyse the effects of a disruption to critical infrastructure services. The impact models assess the flow-on effects of a critical infrastructure service disruption within and across sectors, how the economy and population will be affected, how long the disruption is likely to last, the area affected and how the various infrastructure systems will behave as a result of the service interruption.

The CIPMA Program is delivering strategic support to government and business decision makers involved in CIP, counter-terrorism and emergency management, especially with regard to prevention, preparedness and planning, and recovery.

Specifically, CIPMA is supporting decision making by helping to:

- identify connections between critical infrastructure nodes and facilities within sectors and across sectors
- provide insights into the behaviour of complex networks
- analyse relationships and dependencies
- examine the flow-on effects of infrastructure failure

- identify choke points, single points of failure, and other vulnerabilities
- assess various options for investment in security measures, and
- test mitigation strategies and business continuity plans.

A Business-Government Partnership

The CIPMA Program is an excellent example of a strong business-government partnership. Successful development of CIPMA relies on strong support from a range of stakeholders, including the owners and operators of critical infrastructure, state and territory governments, and Australian Government agencies.

The Infrastructure Assurance Advisory Groups of the TISN and critical infrastructure owners and operators play a key role in the Program, especially in providing information, data and expert knowledge on the operation of the sectors. CIPMA enjoys strong support, especially from the four sectors (banking and finance, communications, energy, and water) currently engaged in the Program.

Data Confidentiality Issues

The Australian Government is committed to protecting the sensitive information provided by the owners and operators of critical infrastructure to the CIPMA Program. To this end a number of security measures have been put in place in accordance with the Australian Government's Protective Security Manual and a secure facility has been constructed at Geoscience Australia to house the capability.

Key Milestones

While CIPMA is a long term capability, development is well underway. In May 2006, an initial 'proof of concept' was successfully demonstrated to over 150 key stakeholders. Coverage of key aspects of the three priority sectors will be achieved by March 2008. Work on the water sector commenced in March 2007 with a series of user requirements workshops. The process for "tasking" the capability commenced in October 2007, with tasking rounds run on a quarterly basis. It is anticipated that other sectors will be included in CIPMA over time.