



Asia-Pacific
Economic Cooperation

2007/CTTF/STAR/002

Overview of Australian Research & Development

Submitted by: Australia



**Secure Trade in the APEC Region (STAR V)
Conference
Sydney, Australia
27-28 June 2007**

Secure Trade in the APEC Region (STAR V) Conference: Overview of Australian Research & Development

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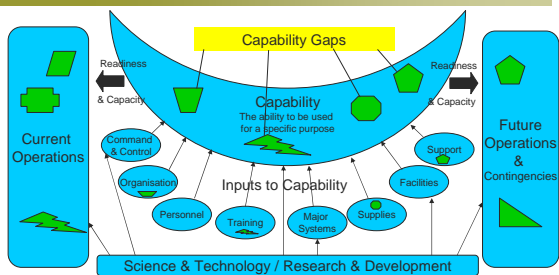


Overview

- National Research Priorities
- Investment in science & technology / research & development
- Collaborative arrangements
 - Public - private
 - National, international
 - Critical infrastructure protection
- Review of transport security research & development



Role of Science & Technology



National Research Priorities

1. Environmentally Sustainable Australia
2. Promoting & Maintaining Good Health
3. Frontier Technologies for Building and Transforming Australian Industries
4. Safeguarding Australia
 - Critical Infrastructure
 - Understanding our Region and the World
 - Protecting Australia from Invasive Diseases and Pests
 - Protecting Australia from Terrorism and Crime
 - Transformational Defence Technologies

<http://www.dest.gov.au/>



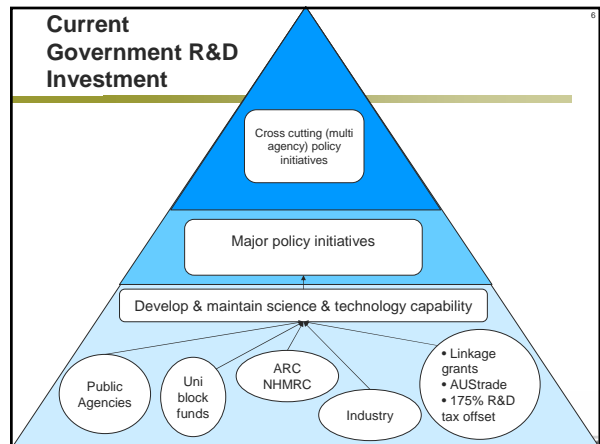
Australian Investment in Innovation

- Approximately \$12B per annum
- Over 50% is by business/industry
 - Other major components include:
 - Government – approximately 20%
 - High education – approximately 25%
 - Private non-profit
- A four fold increase in real terms over the past 3 decades

Source: Shanks, S. and Zheng, S. 2006, *Econometric Modelling of R&D and Australia's Productivity*, Productivity Commission Staff Working Paper, Canberra, April.



Current Government R&D Investment



International Collaborative Arrangements for Science & Technology

Treaties in the APEC Region

- China
- Indonesia*
- Japan
- South Korea
- Russia
- USA

Other regions

- EU
- France
- South Africa*

* Not in force yet



Who is responsible for Critical Infrastructure Protection (CIP) in Australia?

- The Attorney-General's Department (AGD) is the **lead** Agency.
- A Business Government partnership
 - facilitated through the Trusted Information Sharing Network (TISN) <http://www.tisn.gov.au/>
- Sectors including: transport, food chain, energy, banking & finance, water, communications, health, and emergency services
- AGD deliver several CIP programs including:
 - Computer Network Vulnerability Assessment (CNVA)
 - Critical Infrastructure Protection Modelling and Analysis (CIPMA)
- An All – Hazards approach



Research Network for Secure Australia (RNSA)

- **Seeks to bring together the majority of Australia's leading researchers, government and industry leaders.**
 - Focus on critical infrastructure and other security issues
 - 14 industry partners
 - 29 Universities are members
 - Conferences (e.g. security technology Sep 2007)
 - Outreach program to industry
 - Young investigator grants



National Review of Transport Security Research & Development

- Research Network for Secure Australia - Apr 2007
- Inputs from 84 organisations
- Identified 82 projects (22% with Private lead)
- Evaluation by a panel of Government users of R&D identified 43 projects as relevant to their needs
- The primary source of tertiary institution research funding is ARC Linkage Grants and the most common Linkage Grant industry partner are State government-owned transport enterprises.
- For ARC linkage projects, the industry partner typically contributes about 50% of the amount that the ARC contributes.



National Review of Transport Security Research & Development

Projects relevant to transport security	Projects	Estimate of ARC funds	Estimate of Total funds
Security Policy, Risk Assessment, threats, Vulnerabilities and Decision Making	10	\$460,000	\$720,000
Transport Systems, Planning, Development, Logistics and Networks	9	\$530,000	\$600,000
CCTV, Surveillance and Computer Vision	21	\$530,000	\$1,000,000
CBRNE Detection and Response	13	\$520,000	\$1,000,000
Engineering and Security Technologies	12	\$430,000	\$780,000
Blast Consequences	5	\$250,000	\$300,000
Human Factors, Perception and Models	9	\$520,000	\$620,000
Law Enforcement, Private Policing and Legal Issues	4		\$120,000
Training	2	\$100,000	\$150,000
Totals	10	\$3,340,000	\$5,290,000

