

Strengthening the role of industry in national security science and technology

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Capability through collaboration





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Technolo

Collaboration

Stakeholder S&T perspective



Has to be small, lightweight & 99.99% reliable

Listen mate - I define the requirements

PRACTITIONER

Soldier-proof

Has to be best of breed. Have to have it now.

Can't field it without ACIB endorsement





My product can do everything you need

> I need security of contract to innovate

I need flexibility to work out the kinks in my product

- Profit motive
- Contract tenure
- Needs "black box" S&T ready to go
- Only interested in relevant elements of technology

If you push long enough, they'll come around

> You don't get it- this project is unique - I need more time, money

Capability driver

- Systems approach
- **Budget constrained**
- Acquisition strategy
- Risk averse

Best value = cheapest acquisition. Sustainment is someone else's problem

The next DCP funding window is 7 years away

need to see the requirements definition case

mitigate -buy COTS, MOTS

We need to risk



Customer's role is to

integrate, commercialize

- I've moved on

I've been doing this for

years – I don't need

program management

- Maximum possible utility of technology is the goal
- Inherent risk in R&D
- Cost, schedule estimate





Program Mgr



Driven by threat environment

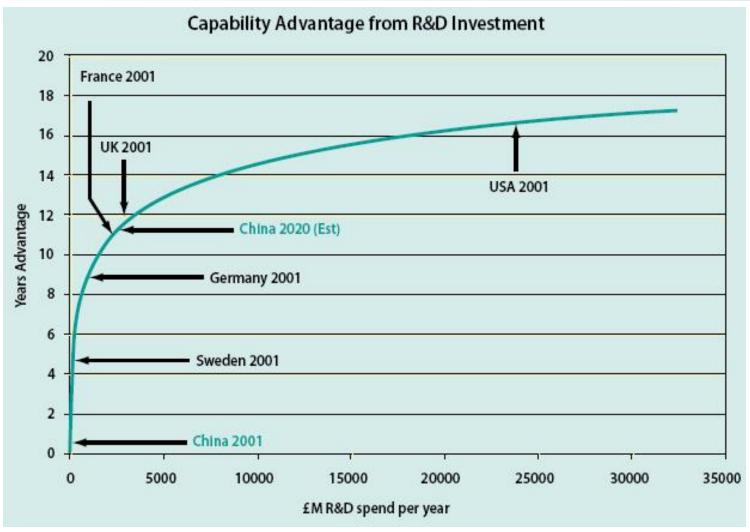
Operational-requirement

Time critical (deployment)

Fieldable, modular, flexible

R&D – the Capability case





Sourced from the UK MOD Defence Industrial Strategy, December 2005 pg 39

DMTC Benefits & Objectives



- Decreased development time to capability impact (for Defence and defence industry)
- Reduced costs to defence for new capability through a collaborative, risk sharing model that reduces development costs to Defence by 60%
- Vehicle for maintaining control of IP for Defence
- Provide a link between industry technical capability and the ADF
- Support a more competitive and productive Australian defence industry
- Create stronger and more integrated supply chains
- Foster enduring collaborative relationships between SMEs, major manufacturers, research organisations, industry bodies and Defence
- Act to ensure knowledge from Australia's research sector is diffused into the defence industry by providing solutions to problems faced by the ADF

Industry Engagement



Benefits & Opportunities

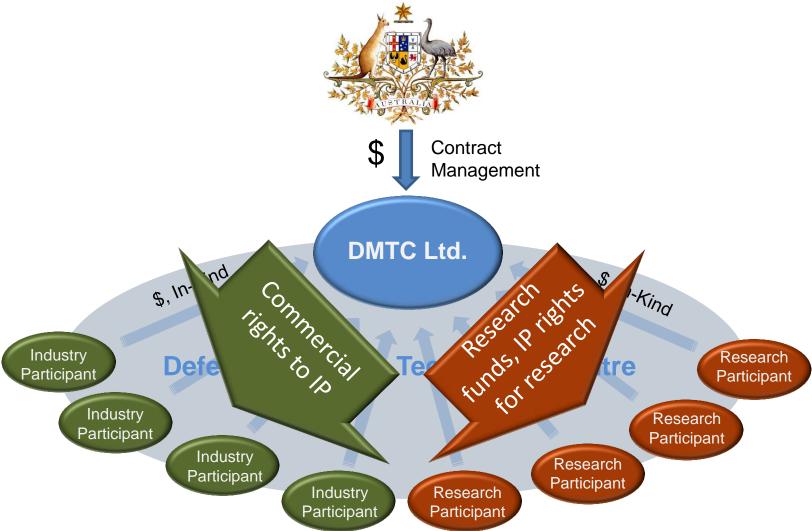
- Burden/cost sharing
- Leverage capability
- Capability validation
- Supply-chain model

Challenges

- Procurement & probity concerns
- Supply-chain model applicability varies
- Intellectual property
- Intellectual capacity

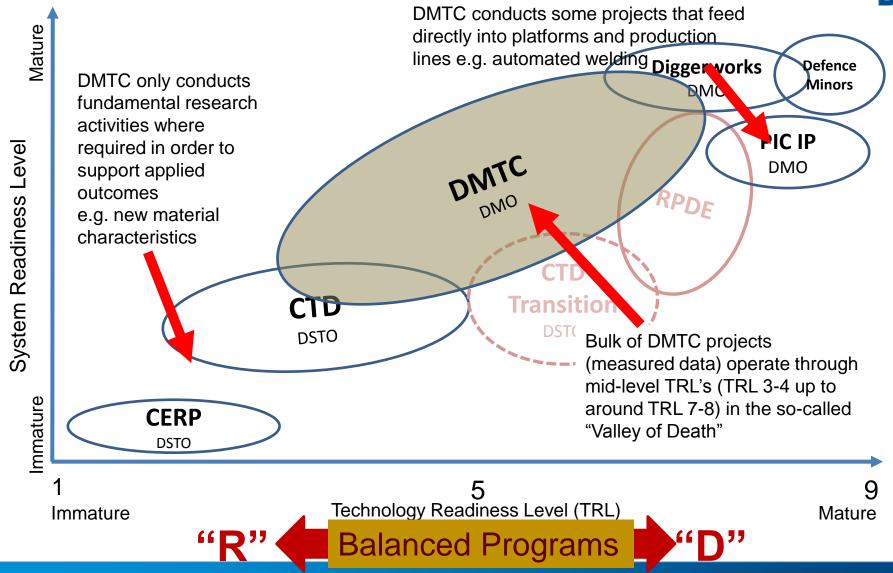
The DMTC Contract Structure





Defence Innovation Programs





Supply Chain Collaboration Model



2 Research Organisations and 5 Universities:



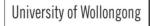














Materials
Producers
and
Suppliers

Enabling Technologies

Component Manufacturers

Manufacturing Technology

Systems Integration

F-35 Joint Strike Fighter





















11 Industry Participants



Framework for IP Management



Specified in Participants Agreement, Project Agreements

- DMTC has ownership of IP
- Partners to keep IP confidential, sometimes secret
- Disclosure possible with DMTC consent

IP Management

- IP managed at a project level
- IP identified at Project reviews and by project & program leaders
- Publishing, security, capability and commercial implications to consider
- IP Register foreground and background IP

IP Management



Robust Model – geared towards rapid utilisation of technology

- DMTC legally and beneficially owns all IP generated
- Participants have automatic, royalty-free & non-exclusive rights to project IP
- IP controlled at the individual project level

Defence / Government Stakeholders

- Access to IP through industry capability (via procurement) but also has claw through rights to all IP generated within projects – Defence access to IP is assured
- Allows Defence to engage with industry via DMTC without locking up IP with any single industry partner.

Industry Participants

• Generally not funded in projects, benefit derived through ability to commercially exploit IP within their use-field, greater competitiveness & supply-chain integration

Research Participants

- Receive bulk of funding for projects, but are not permitted to commercially exploit IP
- Rights to exploit IP for research and education purposes

Industrial capability = strategic capability



A capable, innovative industry sector is a key component of a robust national security policy and strategic framework.

In its absence, Australia will be forced to rely heavily on allies and offshore industrial capability in key areas for some of our most important defence assets, thereby introducing unnecessary strategic risk to national security.

Thank you



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Questions, discussion

