DMTC Medical Countermeasures Program

The Defence Materials Technology Centre (DMTC) is a not for profit collaborative venture that brings together defence industry, universities and government research agencies to develop technologies that will enhance Australia's defence and national security capability. The Medical Countermeasures (MCM) activity being led by the DMTC is the result of extensive work carried out by the Defence Science and Technology Group (DST Group), the Commonwealth Science and Industrial Research Organisation (CSIRO), various industry and academic partners who were focused on establishing a national capability for the advanced development and manufacture of MCMs. The Program has been developed in the context of the quadrilateral (AUS/CAN/UK/US) community and will engage in areas where Australian research and industrial expertise could have had the most impact.

Funding of $5m was provided by CSIRO to begin the Program, and an additional $2M was recently provided by DST Group along with in-kind support in the form of technical expertise. The DMTC has an established governance framework and mechanism for delivering practical, measurable results. The program will follow the existing DMTC leveraged funding model where the start-up funding from CSIRO will be matched by industry and research sector cash and in-kind contributions. There is also the potential to grow the program with support from additional sources should the projects of the program prove to be successful.

MCMs include vaccines, therapeutics and diagnostics for the protection of military and civilian personnel against Chemical Biological and Radiological (CBR) threats, emerging infectious diseases and pandemics. The DMTC MCM program will focus on the advanced development of technologies relevant to the national preparedness strategy. It will include the development of an integrated capability to reduce dependence on non-Australian sources for MCM products.

There is a real opportunity, through the DMTC, to create an integrated multidisciplinary network focused on MCM product development. Australia has a dispersed, relatively small, but highly experienced discovery and development community with expertise and resources relevant to MCM product development. Furthermore, Australia is geographically positioned as an important sentinel for emerging infectious diseases threats and has the potential to become a regional leader in MCM development. By developing capability through collaboration, the DMTC aims to establish a product development pipeline which will form part of the national preparedness strategy.

Program Objective

> *"Deliver MCM product solutions and strategies benefitting, civilian and military health for Australia and globally."*

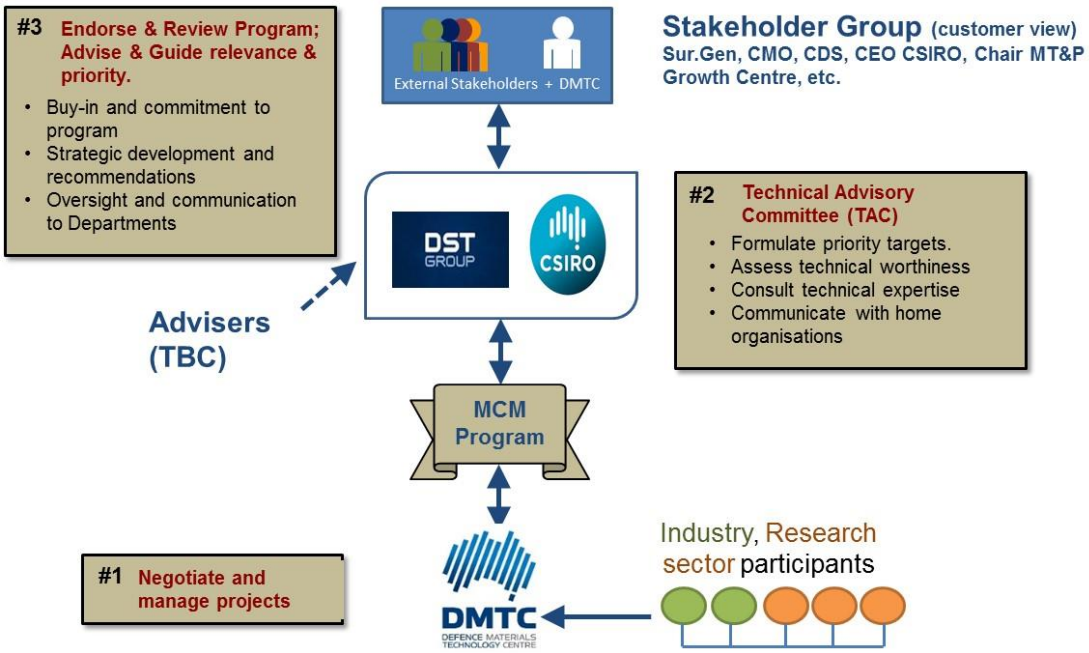
The overarching aim of the program will be to develop leading edge advanced development capabilities and to deploy those skills into activities that support Australian defence, health and national security. The DMTC MCM program is the first attempt in Australia to be proactive and harness the expertise, capability and capacity to support indigenous MCM solutions.

Program Impacts

- *Create a dynamic portal to Australia's MCM product development capabilities to efficiently work with other members of the international MCM Consortium to translate cutting edge science and technology into innovative, safe and effective products.*
- *Evaluate the safety, efficacy, quality and performance of MCM products using regulatory science tools, approaches and advanced development methods.*
- *Ensure a robust and sustainable product pipeline for MCM that emphasises multi-functional capabilities rather than stand-alone outcomes.*

Diverse ranges of translational research tools and clinical pharmacology capabilities will be developed to address the priority pathogen targets of the program. This may include utilising expertise in clinical trials across a broad range of relevant infectious diseases.

Program Governance Structure



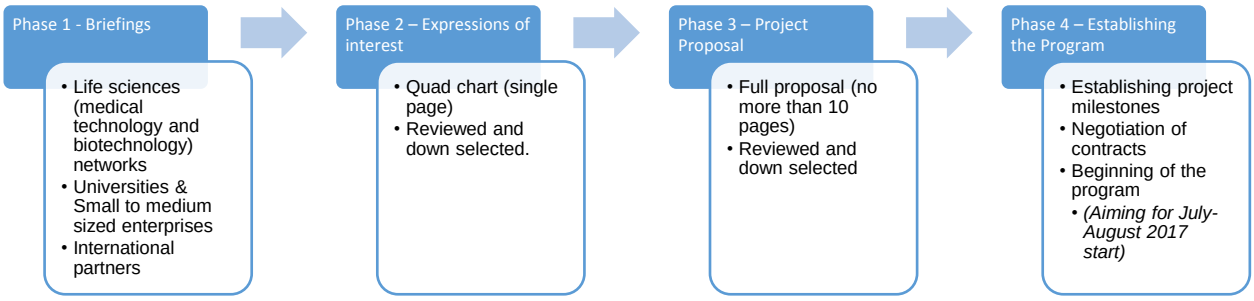
Program Benefits

The DMTC MCM program will create a co-ordinated, multi-stakeholder MCM community which can actively collaborate across identified priority technology targets. It will marry best-practice industry product development and commercial expertise with other relevant public capabilities in universities, public agencies and medical research institutes. This will enable the network to leverage skills, conduct activities at global best practice and improve timelines for MCM delivery. In particular, it will inform national regulatory requirements for the development and manufacture of pharmaceutical, biotechnology and diagnostic products.

Initially, the DMTC MCM program will focus on three key areas of product development:

1. ***Point of Care Diagnostics;***
2. ***Antimicrobial Resistance; and***
3. ***Security Sensitive Biological Agents.***

Program Solicitation Process



Phase 1:

- Briefings have been held around the country either in person or via teleconference. The aim was to expose the Program to a broad audience with an interest in the development of MCMs. This phase is now complete.

Phase 2:

- The Quad Chart will be used as expressions of interest by applicants wishing to participate in the program. A Quad Chart submission must include:
    1. At least 1 Industry participant and 1 Research Participant;
    2. A Technology Readiness Level (TRL) above 3;
    3. The requested amount of funding from the DMTC over a specified time frame;
    4. Break down of in-kind and financial contributions to be made by the applicants;
    5. The relevance of the product to defence or national security.

Quad Charts will be due on Friday March 17, 2017 at 4pm. No late submissions will be accepted.

- After closure, Quad Charts will be reviewed by the Technical Advisory Committee and at most 20 Quads will be selected for a full White Paper Proposal (Phase 3).
- Successful applicants will be notified no later than Friday 14 April, 2017.

Phase 3: (Dates to be determined)

- White Paper proposals will be considered by the Technical Advisory Committee and must conform to a template which will be provided to those successful Phase 2 applicants.
- The White Paper proposals will be no longer than 10-15 pages.

- Once notified, applicants will have two weeks to submit the proposal. No late submissions will be accepted.
- Submissions will be reviewed and down selected by the Technical Advisor Committee. Only 10 full proposals will be submitted to the Stakeholder Group with an aim to award 4-6 projects.
- Successful applicants will be notified.

Phase 4:

- Contract negotiations to be completed no later than June 30, 2017.

Program Contact

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