



Release Date: October 2014

Fact Sheet 14 DUAL-USE

'Dual-use' is a term that refers to technology which can be used for both peaceful and malevolent purposes.

Dual-use goods comprise equipment and technologies developed to meet commercial needs, but may also be used as military components or in the development of military systems or weapons of mass destruction (WMD).

Dual-use biological research is legitimate research that could be misused to threaten public health or other aspects of national security¹. Dual-use can create an ethical issue for researchers, as they intend no harm and are aiming for a good outcome. The issue arises because the outcome could be used for malicious purposes by others².

Experiments of concern² could include those that could:

- demonstrate how to render a vaccine ineffective;
- confer resistance to therapeutically useful antibiotics or antiviral agents;
- enhance the virulence of a pathogen or render a non-pathogen virulent;
- increase the transmissibility of a pathogen;
- alter the host range of a pathogen;
- enable the evasion of diagnosis and or detection by established methods;
- enable the weaponisation of a biological agent or toxin;
- enable genetic sequencing of pathogens;
- synthesise pathogenic microorganisms;
- involve any use of *Variola virus* (smallpox); or
- attempt to recover/revive past pathogens.

EXPORT CONTROLS FOR DUAL-USE GOODS³

The legislative basis for monitoring the export of controlled defence and dual-use goods is through Regulation 13E of the *Customs (Prohibited Exports) Regulations 1958* of the *Customs Act 1901*. Goods, services and technologies not controlled under the *Customs Act 1901*, but that may potentially contribute to a weapon of mass destruction are controlled for export or supply under the *Weapons of Mass Destruction (Prevention of Proliferation) Act 1995*.

Export controls are applicable to defence and dual-use goods including parts and components and related materials, equipment and technologies.

For further information, please refer to the Defence Export Control Office
www.defence.gov.au/strategy/deco

Reference list:

1. National Science Advisory Board for Biosecurity Working Group Status Report presented at meeting of the National Science Advisory Board for Biosecurity, Bethesda, Maryland, USA, 13 July 2006.
2. S Miller & M Selgelid, Ethical and Philosophical Consideration of the Dual-Use Dilemma in the Biological Sciences, Centre for Applied Philosophy and Public Ethics, Australian National University and Charles Sturt University, Canberra, 2006.
3. Department of Defence, Australian Export Controls for Defence and Dual-Use Goods, Department of Defence, Canberra, 2007.