



AUSTRALIAN NATIONAL DESIGN BASIS THREAT APPROVED DECLASSIFICATION

Purpose

1. The Australian National Design Basis Threat (hereafter DBT) gives a description of the attributes and characteristics of potential adversaries who may attempt the unauthorised removal of nuclear material of proliferation concern or the sabotage of nuclear material and nuclear facilities that could lead to unacceptable radiological consequences, against which physical protection systems must be designed and evaluated.

Scope

2. The DBT is used in the design and evaluation of physical protection systems for:
- a) an operating nuclear reactor including any associated fresh or spent fuel;
 - b) any location that holds a Category I quantity of nuclear material¹;
 - c) any transport of a Category I quantity of nuclear material¹;
 - d) any transport of spent nuclear fuel; or
 - e) any other location or quantity of nuclear material, when required under a Permit to Possess or Transport Nuclear Material.²

Armed assault against nuclear facilities and nuclear material

3. The locations and transport activities specified in the scope of this document must be protected against an armed assault of a group of well resourced, determined and dedicated persons seeking to sabotage a nuclear reactor or steal nuclear material. These adversaries are willing to kill and risk death. They are armed with firearms and explosives, have hand tools and equipment, drones, land vehicles (motorbikes, cars or trucks) and may use a combination of tactics and diversions.

Direct aircraft attack on nuclear facilities

4. The locations specified in the scope of this document must reasonably protect against unacceptable radiological consequences arising from an aircraft used as an improvised explosive device.

Direct cyber attack on nuclear facilities

5. Computer based systems and networks linked to the protection or use of nuclear material and nuclear facilities at a location specified in the scope of this document must be protected against cyber attack.

¹ Category I nuclear material as defined by INFCIRC/225/Rev.5 (>5 kg HEU or >2 kg Plutonium). No Category I facilities exist in Australia.

² Permits issued under s13 or s16 of the Nuclear Non-Proliferation (Safeguards) Act 1987.