



# Information warfare

Delivering information warfare capabilities integrated across human, information and physical dimensions to allow the Australian Defence Force to fight in and through contested information environments.

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## CONTEXT

The world has transitioned from the Industrial Age to the Information Age. The Industrial Age consisted of human and physical environments in which people directly controlled their industrial machines. The Information Age retains the human and physical elements, but inserts information environments between them. People now perceive, interact with and control their physical world through these information environments.

The increasing reliance on information environments has delivered unparalleled advances in capability, but this opportunity comes with a threat. Information environments are highly contested by a range of actors, from criminals to nation states. Some nations seek to use information warfare to achieve their objectives without exceeding the threshold of war.

Fighting from inside information environments enables:

- control of an adversary's human environments through influence operations
- control of an adversary's information environments through cyber warfare
- control of an adversary's physical environments through electronic warfare.

The success of future ADF operations will depend on its ability to fight in and through contested information environments. In the Information Age, if you control the opponent's information environments through coordinated and integrated influence operations, cyber warfare and electronic warfare, then you control your opponent.

## OPPORTUNITIES

- Development of advanced cyber warfare, electronic warfare and influence operations capabilities.
- Integration of cyber warfare, electronic warfare and influence operations into a single information warfare capability.
- Development of new information warfare command-and-control concepts, algorithms and architectures.
- Development of synthetic information warfare environments and approaches to wargaming.
- Application of artificial intelligence and machine learning to deliver information warfare capabilities at speed and scale.

'The ADF must understand, and become masters of, the information environment.'

MAJGEN Marcus Thompson,  
Head Information Warfare, 2017

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