D2 RESPONSIBLE AI FOR DEFENCE CHECKLIST - Template

PROJECT DETAILS	
Project Name:	
AI Capability Description:	General Capability Description: The **autonomous functionality** includes: The **type of autonomy** is: The **autonomous componentry** is:

Serial	Threshold Question	Yes, or No?	LEAPP Component to be completed							
			AI	Development Inputs	HMI	AI Use Inputs	AI Use Outputs	AI Objects	Use Case	System of Control
A. AI: What is the AI and how does the AI component function?										
A.1.1	…is designed to enable combat functionality of a weapon[1] or means[2] of warfare									
A.1.2	…is designed to undertake safety critical functions									
A.2.1	…is designed to replicate human judgement and discretion in decision making			▨				▨	▨	▨
A.2.2	…undertakes novel decisions only made possible by complex algorithmic processing			▨				▨	▨	▨
A.2.3	… makes substantive or complex decisions			▨				▨	▨	▨
A.3.1	…can learn or modify its own goals triggers an ongoing requirement for TEVV								▨	▨
A.4.1	…permits decisions to be converted into action			▨		▨			▨	▨
A.4.2	…implements decisions without direct human intervention			▨		▨			▨	▨
A.5.1	…utilises probabilistic methods to compute a decision based upon incomplete or uncertain information									
A.5.2	…operates using an AI model computational processing that cannot be immediately understood or explained – for example, black box functionality, or through complex machine learning such as neural networks, or deep neural processing etc									
A.5.3	…operates using an AI model or computational processing that is not reviewable									

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* If the answer to any of the Threshold Questions is 'Yes', then the white components of the LEAPP are required to be completed.

[1] For Australian purposes, weapon is defined as: 'a device, whether tangible or intangible, designed or intended to be used in warfare to cause: a. injury to, or death of, persons; or b. damage to, or destruction of, objects.'

[2] A means includes sub-systems that enable the weapon functionality include AI decision support tools, AI enhances sensor and communications networks.

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A.5.4	…has embedded values and standards to produce its output									
A.6.1	…is derived from open-source, proprietary/commercial, bespoke, self- or third-party managed code			▨	▨	▨	▨	▨	▨	▨
A.7.1	…relies on a mathematical model that is imprecise (requiring control measures to account for the imprecision)					▨	▨	▨		
B. Development inputs: what is the composition of the AI functionality?										
B.1.1	…uses data that was not provided by Defence, for development, training, or certification		▨		▨	▨	▨	▨	▨	▨
B.2.1	…cannot describe its data structure, cleaning and bias mitigation process, original data owner, data steward, storage access and security and data rights		▨		▨	▨	▨	▨	▨	▨
C. Human Machine Interaction (HMI)										
C.1.1	…does not have a direct human interface during operation of the AI capability		▨	▨		▨	▨		▨	
C.1.2	…has a temporal or geographical dislocation between its interface and effect caused by the AI		▨	▨		▨	▨		▨	
D. AI Use Inputs										
D.1.1	…requires a human operator to input instructions or data for it to operate			▨			▨	▨	▨	▨
D.2.1	… is susceptible to uncontrolled input – including using data from AI capability sensors			▨			▨	▨	▨	▨
E. AI Use Outputs										
E.1.1	…sends output to external sources without being checked by a human first		▨	▨	▨	▨		▨	▨	▨

Serial	Threshold Question	Yes, or No?	AI	Development Inputs	HMI	AI Use Inputs	AI Use Outputs	AI Objects	Use Case	System of Control
E.1.2	…produces an output involving data that is regulated by the law									
E.1.3	…is designed to (or consequentially) provides output that directly contributed to independent action of effect that is regulated by the law									
F. AI Object										
F.1.1	…interacts with humans as the object of the AI action									
F.2.1	…directly affects the rights or obligations of persons or things not operating the system									
G. AI Use Case										
G.2.1	… is intended to enable a method of warfare									
H. System of control: control measures, system integration and AI frameworks										
H.1.1	…is integrated within, or as part of, a larger system and sends output to that system without it being checked by a human first									
H.2.1	…requires specific practice, process, procedure or intervention to restrict, limit or alter its functionality so that it can perform as intended									
H.3.1	…has been subject to TEVV and has not been independently verified									
H.3.2	…cannot be subject to an independent TEVV									
H.4.1	…cannot be operated without developer or contractor assistance (i.e. contracted specialist)									
H.4.2	…cannot be designed or developed or operated without expert assistance									

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I	LEAPP Components requirement summary: (Complete by indicating which components must be completed in the LEAPP, as triggered by the questions in at A-H, above.		☐	☐	☐	☐	☐	☐	☐	☐