

REFERENCE NUMBER AND TITLE: DID ENG-01 AIRCRAFT TECHNICAL SPECIFICATION DATA	
DESCRIPTION/PURPOSE: The Aircraft Technical Specification Data describes the airframe, propulsion and systems of the proposed ACTC aircraft.	
ISSUE DATE: Draft: RFT Response Final: Contract Signature Date	APPLICABLE TO: All responses
APPLICATION/INTERRELATIONSHIP: This Data Item Description contains the format and content instructions for the Aircraft Technical Specification Data.	

PREPARATION INSTRUCTIONS

CONTENT

Basic Aircraft Specification

1. The Aircraft Technical Specification Data **shall** specify details of the aircraft type history including:
 - a. the number of aircraft in service (of aircraft of the same baseline variant state);
 - b. the total fleet number of flying hours (of aircraft of the same baseline variant state); and
 - c. any use of the aircraft type in military flying training roles.
2. The Tenderer **shall** advise the key operating environment parameters, including minimum and maximum temperatures that the aircraft and aeronautical equipment is capable of operating within.
3. The Aircraft Technical Specification Data **shall** as a minimum describe each of the items and systems listed as follows:
 - a. Aircraft structure – identifying materials used and construction methods used
 - b. Landing gear
 - c. Cockpit & Cabin fittings and furnishings
 - d. Engine
 - e. Reduction gearbox
 - f. Propeller system
 - g. Health and Usage Monitoring Systems
 - h. Fuel system
 - i. Hydraulic system

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- j. Primary/Secondary flight control systems
- k. Oxygen / Nitrogen system
- l. Ice detection and protection systems
- m. Crew and passenger seating
- n. Environmental control/pressurisation system
- o. Electrical system – including description of battery/secondary power sources
- p. Internal and external lighting systems
- q. Communications systems
- r. Navigation systems, including stand-by systems
- s. Identification/transponder systems
- t. Flight management systems
- u. Display systems
- v. Central warning system
- w. Built in test/Central Maintenance system
- x. Automatic flight control system
- y. Voice and data recording system
- z. Cabin facilities and equipment – lavatory, galley, wardrobe etc
- aa. Emergency and survival equipment, including smoke protection goggles
- bb. Headset Communications interface
- cc. Role equipment

Avionics System Specific Requirements

- 4. The Tenderer **shall** describe any graduated levels of use available in the configuration of the EFIS.
- 5. Tenderers **shall** advise GPS database requirements for airspace, navigation aids, airfields, approach and departure and the database updating process; frequency and cost;
- 6. Tenderers **shall** provide details of TAWS Class fitted, TAWS functions, use (if any) of a digital terrain elevation database (DTED), DTED level and database source, and mapping database and source and database updating processes, frequency and cost. The preferred map standard is WGS 84

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Hazardous Materials

7. The Tenderer **shall** detail all hazardous materials used in the aircraft and aeronautical equipment, including but not limited to any use of asbestos, Polyimide (KAPTON™) and Polyvinyl Chloride (PVC) wiring.

Role Equipment

8. Where applicable, the Aircraft Technical Specification Data **shall** include detailed specification for all items of role equipment available for carriage and operation on the proposed aircraft to meet the Crown's requirements as laid down in the SORs.
9. The Crown will consider proposals including role specific split-fleets (AWO training and Pilot Training /VIP transport) by converting the internal configuration as required. If proposing such an option, the Tenderer **shall** describe the methodology to maintain availability within a split-fleet including specifically addressing the time and effort to change configuration between roles.
10. The Aircraft Technical Specification Data for each item of role equipment⁴ **shall** include, where applicable:
 - a. Make and model number of the equipment;
 - b. A description of the Role equipment and its function;
 - c. A technical specification describing its performance and rating;
 - d. Photographs and / or diagrams of the Role equipment in both the installed and operational, and uninstalled conditions;
 - e. The location in the aircraft of the installed role equipment;
 - f. The weight of the equipment in pounds or kilograms;
 - g. Details of installation and any specialist tools required for installation;
 - h. Details of its certification and tested operation on the aircraft;
 - i. Details of any limitations related to its carriage and operation;
 - j. Where there are multiple certified and tested options of equipment for a specified role provide a detailed specification on all available options; and
 - k. References to relevant technical and operations publications.
11. Cabin Tie down rings – the Tenderer **shall** detail the quantity, maximum rating and installation requirements for the aircraft cabin tie down rings.

⁴ Excluding AWO training equipment and consoles which are addressed in DID TRG-02.

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