



Dear Industry Member,

**REQUEST FOR EXPRESSION OF INTEREST – EVOLUTIONARY  
DIGITAL GROUND ENVIRONMENT FOR BATTLE GROUP AND  
BELOW C4ISR SYSTEM DEVELOPMENT**

This request is issued to inform the Australian Industries to provide EOI to be part of C4 EDGE.

## **1. Background**

The C4 EDGE Program was the result of an unsolicited proposal, designed to showcase the capacity and agility of Australian Industry, while demonstrating sufficient engineering rigor within the agile development and verification process. The demonstration of Battle Group and Below Combat System C4ISR capability from more than 30 Australian Industries was completed in December 2021.

The Program is an innovative and commercially creative initiative to deliver a world class, technologically competitive sovereign C4ISR Capability.

Following the success of sovereign C4 capability demonstration in December 2021, the next phase of the C4 EDGE program will aim to create an ecosystem of sovereign industries to address the current challenges of the Australian Army.

EOS Defence Systems through C4EDGE will create a roadmap to focus on modular approaches, based around packages of incremental development, that lend themselves to efficient and effective technology insertion, making use of open standards and architectures to fulfil land tactical C4I capability needs.

C4 EDGE will leverage the expertise and cutting-edge technologies of an all-Australian industry team that includes small and medium enterprises from across the nation.

## **2. Project Goals**

The C4 EDGE project objective is to develop a sovereign ecosystem for Australian C4ISR System developed using agile rapid development lifecycle. The high-level technical objectives of the C4 EDGE program are:

Modular - The system will be designed in accordance with an overarching system architecture which adheres to open modular architecture. This will allow individual

Configuration Items to be swapped out for other like Items, facilitate rapid fault rectification, and support system extensibility.

Integrated - The system will enable data traffic to flow between users without artificial impediment and reduce human cognitive workload.

Functional - The system will serve the needs of the users, providing the relevant data (and only the relevant data) at the correct place and time, in an easily digestible and familiar format.

Secure - The system will be resilient against cyber and electronic warfare threats, and gracefully degrade under pressure.

### 3. Services

The C4 EDGE team shall develop a C4 system which is a single tactical data network that would act as a force multiplier.

The below given table summarises the high-level breakdown of the C4 sub-systems for development and implementation of a comprehensive and cost-effective tactical system.

The Sub-systems include but may not be limited to the following:

Reference Number	Category	Sub-Category
EOI-C4EDGE-01	Bearer - Antenna	Line Of Sight – Mesh Network
EOI-C4EDGE-02		Beyond Line of Sight - HF
EOI-C4EDGE-03		Beyond Line of Sight - SATCOM
EOI-C4EDGE-04		Multiband Tactical Antenna
EOI-C4EDGE-05	Sensors	Position Navigation Time (PNT)
		RADAR
EOI-C4EDGE-06	Software Defined Radio	Mounted/Dismounted/Command Post
EOI-C4EDGE-07		Multiband Tactical SDR
EOI-C4EDGE-08	Waveform	Soldier Radio Waveform
EOI-C4EDGE-09		High Band Networking Waveform (HBNW)
EOI-C4EDGE-10	Power Unit	Dismount Power Unit – Renewable/non-renewable
EOI-C4EDGE-11		Mounted/Base Station Power Unit Renewable/non-renewable

Reference Number	Category	Sub-Category
EOI-C4EDGE-12	Voice over Internet Protocol (VoIP)	Voice Gateway
EOI-C4EDGE-13	Data Services	Data Store/Data management
EOI-C4EDGE-14	Network	Cloud based Tactical network
EOI-C4EDGE-15		Data Distribution System
EOI-C4EDGE-16		AI Tactical Network Management
EOI-C4EDGE-17		Network Card
EOI-C4EDGE-18		Soldier Personnel Area
EOI-C4EDGE-19		EUD
EOI-C4EDGE-20	Smart Display Screen	
EOI-C4EDGE-21	Crypto	High Assurance Crypto
EOI-C4EDGE-22	Software - Application	AI Resupply Management tool
EOI-C4EDGE-23	Software - Application	AI Battlefield Simulation/Training tool
EOI-C4EDGE-24	Software - Application	Biometric Analysis and Reporting Tool
EOI-C4EDGE-25	Software - Application	Data Compression Algorithms
EOI-C4EDGE-26	Software - Application	Combat Application and Situational Awareness Management (CASM)
EOI-C4EDGE-27	Software - Application	Blue Force Tracking Tool
EOI-C4EDGE-28	Software - Application	Threat Tracking Tool
EOI-C4EDGE-29	Software - Application	Combat Application and Situational Awareness Management (CASM)
EOI-C4EDGE-30	Software - Application	AI and Machine Learning algorithms
EOI-C4EDGE-31	Physical connectivity	Cables/ Connectors
EOI-C4EDGE-32	ISR/EW	Counter UAS/ Directed Energy/ Weapon Station

Reference Number	Category	Sub-Category
EOI-C4EDGE-33	Compute	Quantum Compute
EOI-C4EDGE-34		VPX Chassis
EOI-C4EDGE-35		Dismount Chassis
EOI-C4EDGE-36	UGV	External System
EOI-C4EDGE-37	UAV	Situational Awareness
EOI-C4EDGE-38	UAV	Range Extension
EOI-C4EDGE-39	Other	Any new category for tactical C4ISR which is not listed above

#### 4. Anticipated Selection Schedule

The Request for EOI timeline is as follows:

Final date for submission of RF-EOI: June 30, 2022

Electro Optic Systems responds to industries' questions: July 31, 2022

Start of negotiation: August 2022

Notification to unsuccessful participant: October 2022

#### 5. Time and Place of Submission of EOI

The Request for EOI will be posted on Australian Industry and Defense Network, EOS website and can also be obtained by contacting email: C4EDGE@EOSDEFENCESYSTEMS.COM.

Responses must be received no later than June 30, 2022. Responses should be clearly marked "RFEOI-C4EDGE" and mailed or delivered to the contact email address given above.

## 6. Elements of Proposal

A submission must, at a minimum, include the following elements:

- Description of the firm that includes a general overview, names, and credentials of management team.
- A maximum two-page narrative outlining the firm's strengths and distinguishing skills or capabilities as they might relate to C4 EDGE.
- Defence Industry Company Quadchart.
- A high-level product or capability description.
- Please indicate the sub-system category number in the title.

## 7. Evaluation Criteria

The successful respondent will be:

- Sovereign Australian Industry designing, developing, and manufacturing products in Australia that can be integrated in to tactical C4ISR capability.

## 8. Possible Roadblocks

At this time, COVID could delay in providing the proposal and acquiring the program from relevant sponsor.

Thanks in advance.

Sincerely,

*Matthew Jones*

Matt Jones

CEO – Australia

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