



# C-UAS GLOBAL MARKET REPORT

2023-2028



**IDGA**  
Institute for Defense and  
Government Advancement



# SUMMARY

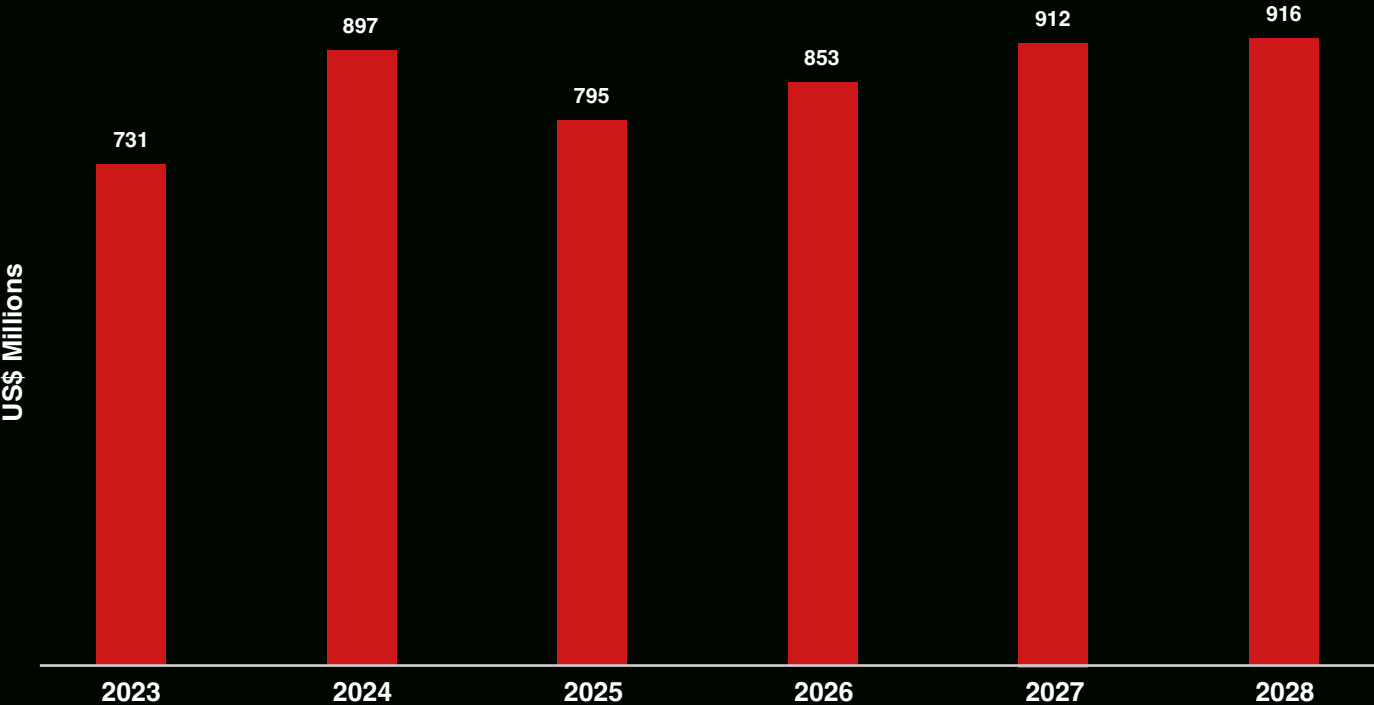
Of our global research, we have identified ten nations of the initial 15 with significant C-UAS programs. The market predictions for C-UAS platforms for the selected 15 countries are to increase from US\$731 million in 2023 to US\$916 million in 2028 at a CAGR of 4.6%. Interestingly, most countries are developing directed energy or laser weapons to destroy drones.

The most significant contributor is the U.S., with a cumulative market size of US\$3.3 billion over 2023-2028. Programs include the procurement of 390 counter-small uncrewed aerial systems (C-SUAS) for US\$2.6 billion and the Counter - Small Unmanned Aircraft Systems Advanced Development (R&D) – for US\$318 million. The country’s Department of Homeland Security also contributes to the market with three running programs. South Korea is the second largest contributor, with a cumulative market size of US\$490 million, followed by France – US\$339 million, and Canada – US\$180 million.

**Selected Countries: C-UAS Platforms Market, 2023-2028, US\$ Millions**

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	731	897	795	853	912	916	5,104
Total	731	897	795	853	912	916	5,104

**Selected Countries : C-UAS Systems, 2023-2028, US\$ Millions**



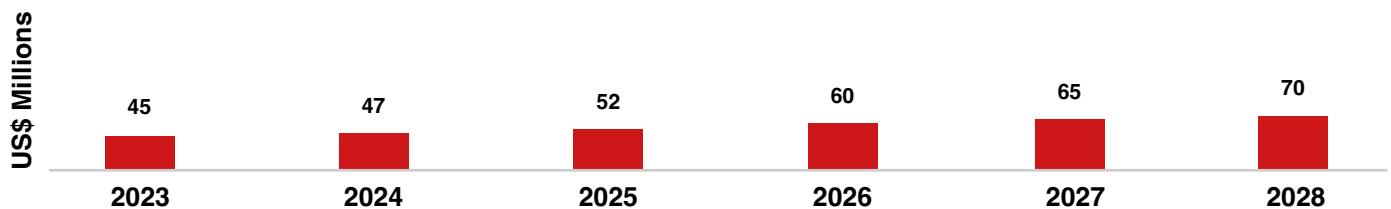
# FRANCE



## France: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	45	47	52	60	65	70	339
<b>Total</b>	<b>45</b>	<b>47</b>	<b>52</b>	<b>60</b>	<b>65</b>	<b>70</b>	<b>339</b>

## France: C-UAS Systems, 2023-2028, US\$ Millions



### Protection Déployable Modulaire Anti-Drone (PARADE)

In April 2022, the French defense procurement agency DGA, awarded a US\$370 million contract to Thales and CS Group, to procure six Protection Déployable Modulaire Anti-Drone (PARADE) systems, operator training and system and equipment maintenance and upgrades. Some of the components of the modular and multi-mission systems will also be made by small businesses in France and the Netherlands. It provides 360-degree site protection, is easily transportable by land, air and sea and can destroy UAVs of all sizes up to 100 kgs. The PARADE systems will be equipped with goniometers that can detect the drone's angle of approach, a radar, an electro-optic system, and a jamming system. All systems are expected to be delivered at the latest by 2032.

### HELMA-P

In June 2022, the French DGA announced that it had placed an order for a prototype of a counter UAS laser weapon system. Called HELMA-P, the system is expected to be deployed during the 2024 Paris Summer Olympics. According to a statement released by the ministry "The HELMA-P system provides a calibrated response to the drone threat, from dazzling the drone's observation instruments to the neutralization of a mini or micro drone (from 100g to 25kg) by altering its structure, causing it to fall in a few seconds." Over US\$100 million are expected to be spent on the R&D and production phase of the HELMA-P system, over the period 2023-2028.



# GERMANY



## Germany: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	21	5	5	-	-	-	31
<b>Total</b>	<b>21</b>	<b>5</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>31</b>

## Germany: C-UAS Systems, 2023-2028, US\$ Millions



### ASUL

In August 2022, the German Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw) announced that it had purchased five counter-unmanned aerial systems (C-UAS) called ASUL. Manufactured by the Electronic System and Logistics Group (ESG), ASUL comprises two containers measuring 10 ft and 20 ft. The former has a mast, three radars, a camera with day and night vision and a radio frequency (RF) direction finder. The 20 ft system on the other hand includes a remote-controlled jammer, which can detect and destroy drones at a distance of even a few kilometers. The five systems are expected to cost around US\$41 million with deliveries culminating in 2023.

### Counter Emerging Air Threats (C-EAT)

In December 2022, the German armed forces Bundeswehr announced that it was looking to acquire Rheinmetall's small counter drone system that is being used by the Austrian armed forces as well. The counter-small unmanned aerial system (C-sUAS) is available in two shelter units and can be integrated with trucks and trailers. It also has an integrated, stabilized 360° electro-optical PTZ sensor that provides augmented verification and tracking capabilities. A total of US\$10 million is expected to be spent on this procurement over the period 2024-2025.



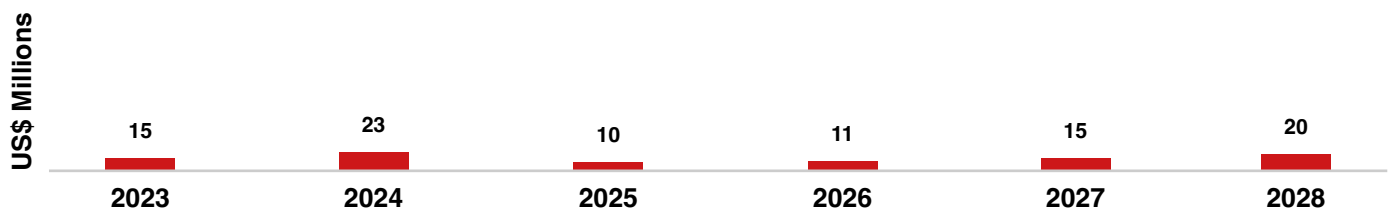
## INDIA



## India: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	21	5	5	-	-	-	31
<b>Total</b>	<b>21</b>	<b>5</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>31</b>

## India: C-UAS Systems, 2023-2028, US\$ Millions



## Man Portable Drone Jammers

In January 2023, the Indian Army issued an RFP to acquire 200 man-portable drone jammers with the capabilities to jam control and communication uplinks/downlinks, data and Global Navigation Satellite System (GNSS) links. It should also have a target identification range of 5 kms, a jamming range of 2 kms or more, should be able to operate in temperatures ranging from minus 10 degrees Celsius to 45 degrees Celsius and engage drones in the frequencies 100 MHz to 6 GHz. The RfP also states that the jammers should be able to simultaneously jam GNSS (BeiDou, GPS, GLONASS and IRNSS), command and control data and telemetry links of the target unmanned systems.

## Canister-Launched Anti-Armour Loiter Munition (CALM) Systems

In early 2022, the Indian Army issued a tender to buy 150 canister-launched anti-armour loiter munition (CALM) systems, which are essentially pre-loaded canisters that are able to remain airborne for a minimum of 15 minutes at maximum operational range. The total cost of the acquisition is US\$7.5 million and deliveries are expected to finish in 2024. Further, in November 2022, the MoD released an RFP to procure an additional 180 CALM systems and nine enhanced versions of the integrated drone detection and interdiction system deployed along India's western and northern borders. This procurement is expected to cost around US\$9 million with deliveries expected to culminate in 2024 as well.



# ISRAEL

## Israel: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	4	4	4	4	4	4	24
<b>Total</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>24</b>

## Israel: C-UAS Systems, 2023-2028, US\$ Millions



### SMASH 2000L and 3000

Israeli defense manufacturer Smart Shooter develops two computerized optical counter drone systems called SMASH 2000L or SMASH 3000. These autonomous fire control systems (FCS) for assault rifles, use AI powered image processing to lock on to targets and destroy them. They are also powered by a rechargeable smart lithium-ion battery pack that allows for a 72-hour operational life on a single charge. It's international consumers include the U.S. and India. Israel is expected to spend around US\$24 million over the period 2023-2028 for the procurement of these systems.



# ITALY



## Italy: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	3	3	4	6	6	8	30
<b>Total</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>30</b>

## Italy: C-UAS Systems, 2023-2028, US\$ Millions



## Counter-UAS Systems

In October 2021, the Italian military announced the testing of directed energy weapons to destroy drones, at the unmanned aerial vehicle center of excellence at the Amendola Air Base in southern Italy. The government is expected to spend around US\$30 million on the R&D and productions of these systems, over the period 2023-2028.



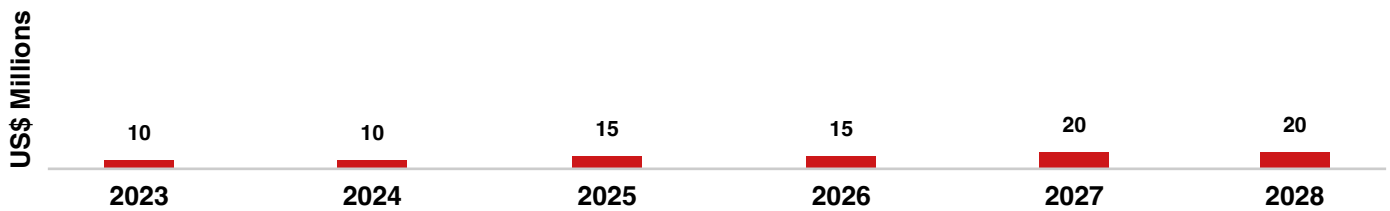
# SAUDI ARABIA



## Saudi Arabia: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	10	10	15	15	20	20	90
<b>Total</b>	<b>10</b>	<b>10</b>	<b>15</b>	<b>15</b>	<b>20</b>	<b>20</b>	<b>90</b>

## Saudi Arabia: C-UAS Systems, 2023-2028, US\$ Millions



### National Counter Drone System

Saudi Arabia began developing a national counter drone system in response to increasing drone attacks on its Abqaiq and Khurais oil facilities. According to Saudi Arabian Military Industries CEO Andreas Schwer, the new system is being built in partnership with international companies and will have radars, command-and-control stations, and advanced networking capability. An estimated US\$100 million is expected to be spent on developing and procuring these anti-drone systems.



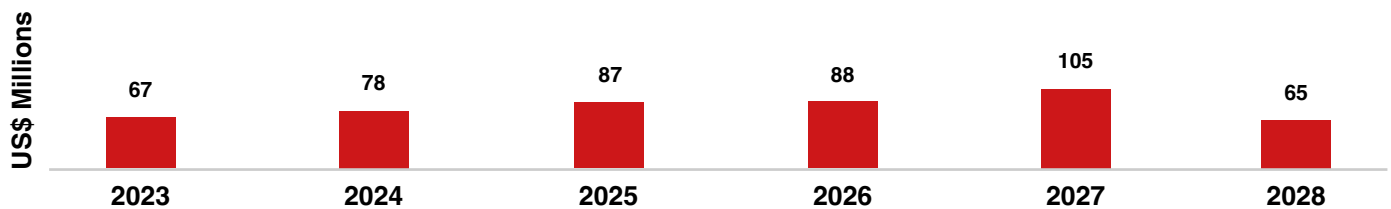
# SOUTH KOREA



## South Korea: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	67	78	87	88	105	65	490
<b>Total</b>	<b>67</b>	<b>78</b>	<b>87</b>	<b>88</b>	<b>105</b>	<b>65</b>	<b>490</b>

## South Korea: C-UAS Systems, 2023-2028, US\$ Millions



### Sky Spotter

According to a January 2023 report by Yonhap News Agency, the South Korea Ministry of National Defense (MND) is looking to procure the Sky Spotter drone tracking system from Israel. Manufactured by Rafael Advanced Defense Systems, the system can detect and track drones and balloons that have been used in the past for terrorism by North Korea. It uses machine learning powered algorithms to improve the detection of hostile assets and drastically reduces false alarms. Interestingly, the Sky Spotter can be used either with a radar or as an independent system. A total of US\$50 million is expected to be spent on this program over the period 2023-2028.

### Laser Oscillator

In May 2021, the South Korean Agency for Defense Development (ADD) announced that it had awarded Hanwha Corporation a US\$21.9 million contract to develop a laser oscillator prototype to be integrated in a laser-based short-range air-defense weapon system. The system uses a technology that combines multiple lasers with different wavelengths into a single beam, a technique called spectral beam combining. The ADD aims to initially use the laser oscillator to engage drones but eventually develop the technology so that it is capable of intercepting fighter jets and satellites.



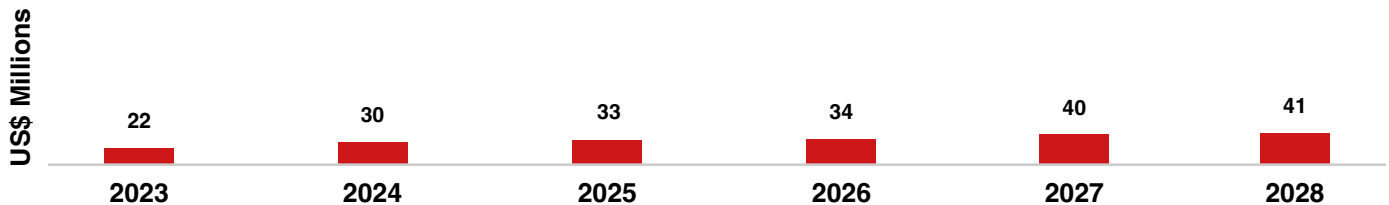
# TURKEY



## Turkey: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	22	30	33	34	40	41	200
<b>Total</b>	<b>22</b>	<b>30</b>	<b>33</b>	<b>34</b>	<b>40</b>	<b>41</b>	<b>200</b>

## Turkey: C-UAS Systems, 2023-2028, US\$ Millions



### Şahin 40-millimeter Anti-Drone Weapon System

In August 2022, Turkish Defence Industry President İsmail Demir announced that the indigenously manufactured Şahin 40-millimeter anti-drone weapon system had started being delivered to the Turkish Armed Forces, after the successful completion of its acceptance tests. Developed by Aselsan to destroy low-cost kamikaze drones, the Sahin includes various subsystems such as a stabilized turret, precision stabilized router, thermal camera, laser range finder, task computer, weapon and servo control unit, programming unit, meteorological sensor and muzzle hardware. It has an engagement range of 700 meters.

### Alka Directed Energy Counter-Drone Weapon System

In December 2022, the TAF reported that it had finished yet another round of testing on its Alka directed energy counter-drone weapon system. Manufactured by Roketsan, Alka uses an electromagnetic jamming system and a 50-watt laser to destroy short-range targets such as drones, bomb traps and improvised explosive devices (IEDs). It's electromagnetic system remains operational even at a range of 1,000 meters, while the laser is effective at 750 meters. It was first unveiled in 2019 after five years in the research and development phase and is currently in the mass production stage. Around US\$50 million is estimated to be spent on the development of this system over the period 2023-2028.



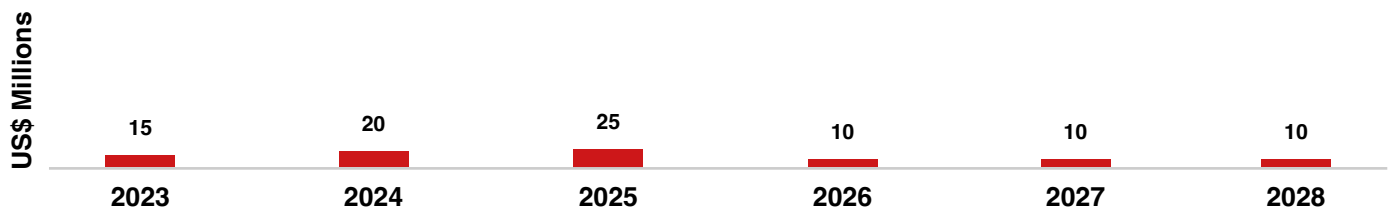
# UAE



## UAE: C-UAS Platforms Market, 2023-2028, US\$ Millions

Type	2023	2024	2025	2026	2027	2028	2023-2028
C-UAS Systems	15	20	25	10	10	10	90
<b>Total</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>90</b>

## UAE: C-UAS Systems, 2023-2028, US\$ Millions



### SKYSHIELD

In February 2023, the UAE defense manufacturer EDGE Group showcased the SKYSHIELD multi-layered counter-UAS system, at the International Defence Exhibition & Conference (IDEX) 2023 in Abu Dhabi. The system contains state of the art sensors, 3D radars, and electro-optic cameras. The UAE is expected to spend approximately US\$40 million to procure an unspecified number of the SKYSHIELD systems with deliveries finishing in 2025.

### Left of Launch Systems

In response to the increasing drone attacks in the country, the UAE and the U.S. have partnered to develop anti-drone solutions called Left of Launch. These systems are expected to stop the drone attacks even before they have launched and if according to Gen. Kenneth F. McKenzie, commander of U.S. Central Command (CENTCOM), if they are unable to stop their launch, they will be able to shoot them down. This program has been estimated to value around US\$50 million.

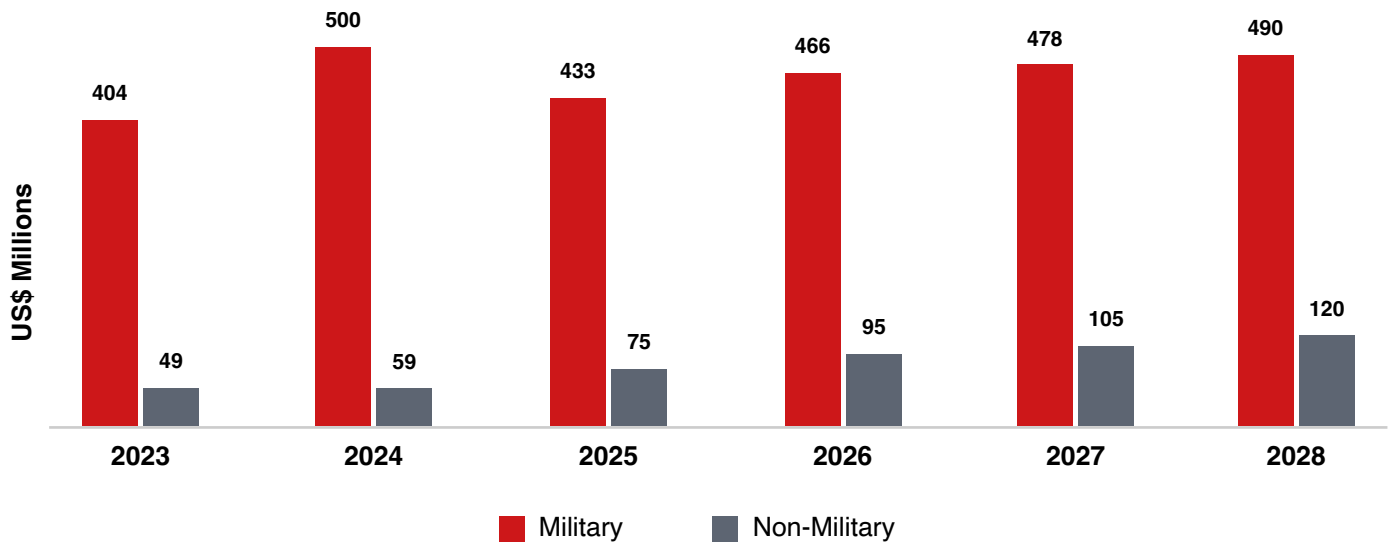


# UNITED STATES

**U.S.: C-UAS Platforms Market, 2023-2028, US\$ Millions**

Type	2023	2024	2025	2026	2027	2028	2023-2028
Military	404	500	433	466	478	490	2,771
Non-military use (Homeland and others)	49	59	75	95	105	120	503
<b>Total – C-UAS</b>	<b>453</b>	<b>559</b>	<b>508</b>	<b>561</b>	<b>583</b>	<b>610</b>	<b>3,274</b>

**UAE: C-UAS Systems, 2023-2028, US\$ Millions**



## MILITARY

### Counter Small Unmanned Aerial System (C-SUAS)

This program involves the procurement of 390 C-SUAS systems including fixed, semi-fixed, mounted, dismounted, and handheld counter-UAS, not only for the U.S. armed forces but also to protect strategically important Department of Defense (DoD) facilities worldwide. These systems will have various capabilities including electronic warfare, command and control and kinetic and non-kinetic weapons. In October 2022, the Army announced that it was seeking white papers from potential vendors with systems ready for testing by May 2023 and at over 6 Technology Readiness levels. They are also expected to possess capabilities of detecting and tracking drones at a distance of 4 kms or more and also integrate with Forward Area Air Defence Command and Control. The Army is expected to spend US\$1.9 billion on the acquisition of these platforms over the period 2023-2028.



# UNITED STATES



## Counter Unmanned Aerial Systems

This program includes four components: Fixed/Mobile System Development, Technology Refresh for Army Joint Urgent Operational Need/Joint Emergent Operational Need (JUON/JEON) Efforts, Family of Counter UAS Systems (FoCUS) and Next Generation Product Development.

**Fixed/Mobile System Development:** involves the development of hardware and software for a small, flat-panel fire control radar, to provide Fixed Site LIDS (FS-LIDS) and mounted systems with an enhanced air surveillance capability against fixed wing aircraft, rotorcraft, and UAVs.

**Technology Refresh for Army JUON/JEON Efforts:** includes technological development of C-UAS systems in terms of electronic warfare effectiveness against current and future threats.

**Family of Counter UAS Systems (FoCUS):** integrate artificial intelligence (AI) and machine learning (ML) to enhance UAS sensor search, target interrogation, and verification capabilities.

**Next Generation Product Development:** focuses on the development of new systems through the integration of emerging technologies, for deployment in 2035.

A total of US\$299.2 million is expected to be spent on this procurement over the period 2023-2028.

## NON-MILITARY

### Counter Drone Support – Department of Homeland Security (DHS)

In April 2022, American company Amentum was awarded a US\$260 million contract to demonstrate and evaluate C-UAS technologies and systems, for the Department of Homeland Security (DHS). This includes R&D and testing capabilities in the areas of C-UAS related cyber vulnerabilities, radio frequency spectrum measurements and integration and deployment of prototype C-UAS systems across various mission areas. Around US\$240 million is expected to be spent on this program over the period 2023-2028.

### Counter-UAS System Acquisition – Department of Homeland Security (DHS)

The U.S. DHS has issued a request for information (RFI) for its latest counter-UAS acquisition program. The department is looking for both fixed and man-portable systems that can be operated in all weather conditions and in day or night. They should also be of varying configurations including fixed-wing, vertical take-off and landing, or hybrid. The system is expected to include a drone, a ground-based controller, and a communication network between the two. Around US\$250 million is expected to be spent on this procurement over the period 2023-2028.





# Confronting the Threat of UAS from Homeland to the Battlefield

## 2023 SPEAKERS



**Colonel Tony Behrens,**  
Deputy Director,  
**Joint Integrated Air  
and Missile Defense  
Organization (JIAMDO)**



**Colonel William Parker,**  
Deputy Director,  
**U.S. Army Joint Counter-  
small UAS Office (JCO)**



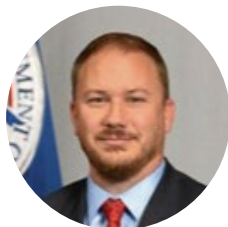
**Mike Torphy,**  
Supervisory Special Agent,  
Surveillance Emerging  
Technologies Unit,  
**FBI**



**Darshan "Dash" Divakaran,**  
Head of Airspace Innovation,  
**AFWERX**



**Stanley Darbro,**  
Deputy Director,  
**Army Rapid Capabilities  
and Critical Technologies**



**Brent Cotton,**  
Director,  
**DHS C-UAS Policy**



**Tom Driscoll**  
CTO & Co-Founder  
**Echodyne**



**Sarah J. Parker,**  
C-UAS IPT Lead,  
**DEVCOM**



**Yannick Veilleux-Lepage,**  
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of Canada,  
**Department of  
National Defence**



**Jarred D. Pennington,**  
Branch Chief, Unmanned  
Systems Security Branch,  
**Federal Protective Service**



**Lieutenant Colonel  
Emory J. Hayes,**  
Military Deputy, Robotics  
Requirements Division,  
**U.S. Army Futures  
Command**



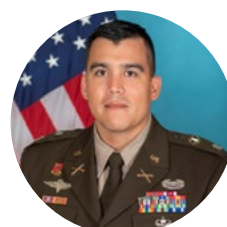
**Kevin Jinks,**  
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**U.S. Department of Justice**



**Zak Kallenborn,**  
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**Ryan Berry,**  
UAS Security  
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**Federal Aviation  
Administration**



**Lieutenant Colonel  
Paul Santamaria,**  
Program Manager,  
JPEO Armaments &  
Ammunition,  
**US Army**



**Scott Parker,**  
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Infrastructure Agency**