CON-DR IC-DS
CON-DR integrated
Counter-Drone System
**CON-DR**

Leonardo’s CON-DR system was created to counter the growing threats perpetrated by drones against civil, industrial or governmental structures that architecture and the high modularity of the CON-DR system allows to develop and apply the most rapid and effective surveillance, detection and response solution suitable for any type of civil or military installation.

Leonardo CON-DR system supporting the operator to Observe, Orient, Decide and Act (OODA Paradigm), provides:

- enhanced surveillance and early detection
- enhanced active protection using effective reaction systems and integrating soft kill and hard kill capability
- improved ability to exercise easy-to-use Command & Control for responding to potential multiple threats with an intuitive representation of AOI, list of alarms and threats evaluation
- CON-DR systems family has been designed in a scalable fixed, transportable and mobile configuration to be easily adapted to the surrounding scenario and potential threats. It is proposed to protect a wide range of assets. As an example

- in **Urban Environment** (i.e. Government buildings adoption of only passive sensors (e.g. Direction Finder, E/O system). Man portable net launcher may be employed only when needed.
- in **Industrial and Critical Infrastructure Environment** (i.e. Airports) the integration with active sensors (e.g. radar) and actuators (e.g. jammer). Passive sensors increase detection probability.
- in **Open Land** in open land the integrated usage of low power emitting radar together with Electro-Optical and Radio Frequency sensors offers a precise detection of approaching drones
SYSTEM ARCHITECTURE

An highly modular, scalable and deployable architecture is the key factor to provide a flexible hardware and software solution to meet different operational needs.

A typical configuration of CON-DR system, in a fixed, sheltered or fast deployable solution, includes the following components and equipment, by Leonardo or third parties:

- **C2 command post** for situational awareness generated by means of proprietary algorithms and data from the external sensors, helps operators in taking the proper decision to manage the drone threat
- **Radars and Electro-Optical sensors** for observation and surveillance tasks in outdoor areas
- **Direction Finder** passive sensors for detection of RF signals
- **Acoustic sensors** for close range detection
- **Soft Effectors** such as Jammers and/or Net Launchers
- **Lethal Effectors** such as Gun Systems for hard kill
- **Interceptors** such as cooperative drones

EXPERTISE AND FACILITIES

The configurable modular re-use concept behind a Counter Drone solution demands more than just an ‘installer’ or an ‘equipment provider’. A **Mission System Integrator** must be appointed, capable of applying a specialized and interdisciplinary system engineering, management and support capability.

The advantages of CON-DR system comes from the Leonardo long tradition of partnership with Army and Air Forces. This provides a proven understanding of the factors affecting capability and affordability, which can be balanced in a land context, whatever it is.

An in-house team of Mission and Support System experts proactively supports the development and maintenance of CON-DR defense standards.

Continued investment in engineering facilities ensures the availability of the breadth and depth of skills necessary to deliver and support integrated, mission-ready solutions.