

**DEFENSE AND SECURITY** 

# **AIRDEF**

Guaranteeing airspace sovereignty

indracompany.com



# **AIRDEF**



AIRDEF offers multiple filters, automatic alerts and identification and merger standards to reduce manual operator interventions

# **DESCRIPTION**

Indra's AIRDEF system is an air defence command and control system for centres at fixed or deployable locations.

The system is scalable both in terms of the number of operator positions and capabilities.

AIRDEF comprehensively covers all planning, execution and control stages of the air operations that it oversees and, when the operation so requires, can coordinate with civil air traffic control centres.

It is an advanced command and control system that includes all the tools required for efficient airspace surveillance and control.

It features a revolutionary interface: clear, attractive, intuitive and with a 3D perspective that provides all the real-time information that each operator needs to manage its airspace

AIRDEF provides operators with the global information (RASP) that they need to make decisions.

The system features the latest measures required to guarantee operating security. This includes the adoption of specialised procedures and tools to neutralise and control cyberthreats.

#### **OPERATING CYCLE**

The system ensures full coverage of the complete air surveillance cycle, including planning ahead for missions, airspace surveillance and all kinds of air operations, both defensive and offensive, threat evaluation and the allocation of weapon and intercept systems, as well as data analysis and recording tools for post-mission use, both in training and audits.

#### **MERGING**

The system manages and merges data from all types of sensors to produce the RASP (Recognized Air Surface Picture).

It thus merges data from multiple sources, which is then shown in the GIS and includes information from a range of different radars and data links to display a single track.

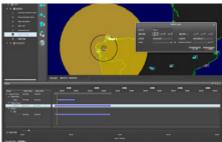
The operator may view the detailed composition of tracks via information displayed in tables.

#### **TDLs**

The system is capable of incorporating all kinds of data, including information from a range of sensors and intelligence and civil air traffic data to provide controllers and commanders with a global status of the airspace. This information is integrated using standard protocols: ASTERIX, MIL-ASTERIX, ADEXP.

The AIRDEF system operates, among others, with Link 11, Link 11B, Link 16, IREAP.





### **RELEVANT FUNCTIONS**

#### **PLANNING**

- Graphic modelling via the Air Coordination Order (ACO) and Air Tasking Order (ATO) modeller, using a GIS (2D and 3D).
- Information and management of available resources, incorporating information supplied by airbase operators.
- Exporting the ATO/ACO, using the automatic generation tool ADatP-3.

#### MERGING DATA FROM SENSORS

- Association, correlation and combination of data from multiple sources to create a single track, estimating position, intention and identity.
- Integration of all types of radar protocols.

# SIMULATION AND TRAINING

- Tool to model and generate synthetic radar data and load it to the system.
- Radar data may be modified and combined with real data.







