



INTEGRATED AIR AND MISSILE DEFENCE

MULTI DOMAIN INTEGRATED AIR AND MISSILE DEFENCE

To counter the rapidly evolving spectrum of threats ranging from Unmanned Aerial Systems (UAS)to cruise and ballistic missiles, robust integrated defence systems are required to protect critical assets and allow a timely response.

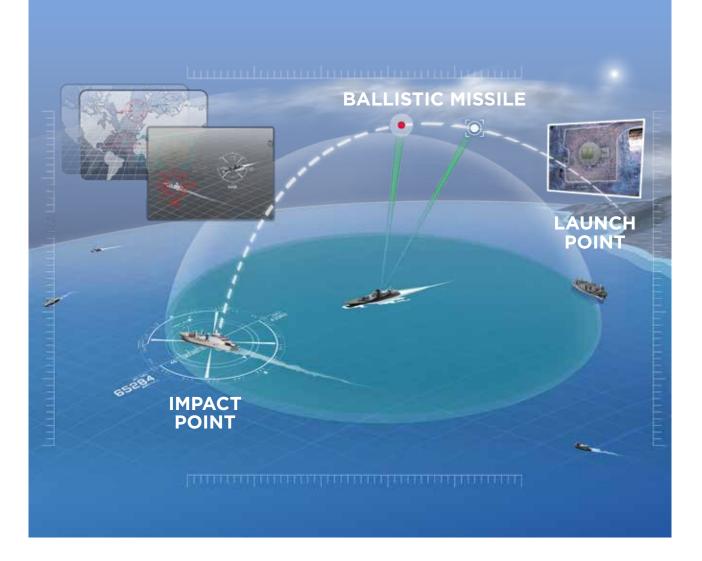
Leonardo delivers a portfolio of tailorable integrated defence solutions, leveraging years of proven expertise in the provision of defence capabilities.

Our long and proven experience is based on a close collaboration with military, government and industrial leaders worldwide and allows us to design, develop and support the most effective, reliable and cost awareness protection solutions.

We work in partnership with our customers to ensure constant, uninterrupted security against an ever evolving threat landscape by engineering scalable, flexible and affordable integrated layered defence solutions.

An increasing demand of joint operations requires interoperability among multiple domains (land, coastal, littoral and blue water) and budget constraints implies technological choices based on reliable, future ready and open architecture systems to ensure a seamless plugand-play integration.





AIR SURVEILLANCE AGAINST COMPLEX TARGETS

Our long range surveillance and air defence radars comply with the most challenging operating requirements:

- Contribute to the defence against ballistic missiles, whose proliferation is a growing threat to the population, territory and forces
- Provide at the same time a 360 degree aerial situation, precise and up to date, even against more and more manoeuvrable 'air breathing' targets and with small radar sections (drones, fixed-wing and rotarywing aircraft, missiles)
- High mobility (air, road, rail, sea) and quick deployment
- High reliability and low maintenance effort (and cost)

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Radar Control Centre

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OPERATIONAL CAPABILITIES

COMMAND AND CONTROL

Leonardo's core building block to ensure the timely and effective response to any threat is the command and control system enabling monitoring, information sharing, interception and assessment.

Monitoring

Our ground-based or shipborne radars are able to detect and track any threat within the airspace coverage and feed the command and control system with such data.

Information Sharing

The command and control system gather and merge together all the available information coming from heterogeneous sensors, creating a comprehensive and real-time operational picture of the situation and share it with the available effectors.

Interception

Effectors like weapons systems and interceptors then provide appropriate and timely action.

AIR SURVEILLANCE

Air Surveillance has to support the required decisions or tasks with accuracy, timeliness and completeness.

The key requirement for airspace surveillance is related most directly to air defence and force protection, namely locate/identify targets in flight to support/allow attack by friendly assets.

The main warfighting operations tasks supported by our Air Surveillance System include:

- Create and disseminate Recognised Air Picture of hostile activity (i.e. general situational awareness)
- Radar management for sensor integration/control
- Alert own forces of the presence and activities of air platforms and implement appropriate passive and active countermeasures
- Localise and identify enemy infrastructures or targets in flight and/or supporting forces for supporting attack by friendly assets.

PRODUCT PORTFOLIO

Leonardo offers an integrated, system-of-systems solution for the full detect-to-engage spectrum for any threat and to complement existing assets, thus responding to threat diversity with a multi-layer defence system. Our air defence systems leverage a number of inhouse produced key sub-systems and components, including radars, command and control facilities, communications networks, and electronic warfare suites as well as the superior capability to integrate existing assets.



COMBAT MANAGEMENT SYSTEM



KRONOS POWER SHIEL



MEDUSA MK4/B



HF 10KW

SPS732



SOC SECTOR OPERATIONS CENTRE



RAT31DL/M 3D LONG RANGE MOBILE PADAR



KRONOS LAND MULTIFUNCTIONAL RADAR



KRONOS DOME C-RAM RADAR



TSM 3DS SATELLITE TERMINAL





ADOC IR DEFENCE OPERATIVE CENTRE



KRONOS GRAND MULTIFUNCTIONAL RADAR



FALCO PLUS IRE CONTROL SYSTE



PAR 2090C PRECISION APPROACH RADAR



KRONOS POWER SHIELD/T RADAR



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