

THALES



Optronics and Communications for Naval Forces

From platforms to networks

Securing your future



World leader in defence optronics and communications, Thales offers a comprehensive tri-service response for all types of platforms - surface ships, submarine, maritime patrol and shipbased aircraft - covering the full range of naval requirements.

From equipment to tailored system solutions

The broadest product portfolio that provide the means to detect, observe, communicate, identify, navigate, target and enhance survivability: **Optronics, communications, electronic warfare, navigation and identification equipments.**

C4ISR system solutions that contribute to operational superiority in the joint theatre of operations - enhancing capabilities for **surveillance and reconnaissance, effective ship defence, naval network enabled capability...**

Delivering cost-effective solutions

Serving all, land, air, and naval forces worldwide, Thales draws upon its powerful tri-service equipment hub and systems integration and design capabilities to leverage the synergies that add value for our customers. Our solutions are designed to meet your requirements - they are:

- » **Interoperable** through the C4ISR chain, from tactical to strategic level, for both joint and allied levels (NATO, US, European.);
- » **Competitive** - leveraging the benefits of the IT revolution: implementation of dual technologies, COTS/MOTS components, open architectures and standard international protocols;
- » **'Network Ready'** - the design specification of all our products meets network-enabled requirements;
- » **Scalable** - providing theatre-wide information dominance through incremental integration of equipment, sub-systems and systems in the C4ISR chain;
- » **Innovative** - meeting operational requirements with cutting edge technology: software radio, signal and image processing, high-tech optics, cryptography,...
- » **Secure** - delivering end-to-end security whatever the operational environment;
- » **Sustainable** - partnering with our customers, we develop modular solutions and provide attractive technology transfer opportunities as well as local service through a worldwide network of companies.



Partnering for Transformation

» Thales offers an effective response to navies' increased needs for cooperation in the **joint theatre of operations**, building on its multi-milieu experience and resources such as the **Battlespace Transformation Centre**.

» Thales serves **more than 40 navies worldwide** with longstanding partnerships with the Royal Navy and the French Navy.

» Thales brings **worldclass technology** to the naval theatre of operations guaranteeing **full support** to its customers from the definition of system specifications to the design, manufacture and through life service.

An International player: references and achievements

Optronics Systems

Netherlands: LCF: thermal imaging sensor for the EO director

United Kingdom: Visual system for Royal Navy's Astute class Submarines, Advanced Naval IRST technology demonstrator programme

United States: High definition thermal imager for Phalanx CIWS

Integrated Communications Systems

France: BPC, PA2, HORIZON Frigates

Germany: K130 Corvettes

Malaysia: SCORPENE Submarine

United Kingdom: T45 Destroyers, Royal Navy Landing Platform Dock (Replacement)

HF Communications

Denmark: Supply of HF Systems to Royal Danish Navy Flexible Support Ships Programme

France: OMAR HF NG retrofit and upgrade

United Kingdom: SR(S)7397 Royal Navy HF Upgrade Programme

Satellite Communications

Belgium: Navy E71 frigates

France: HORIZON Frigates (N2000 Programme)

C2IS and Naval Force Intranet

France: SIC 21: new generation command information system, RIFAN: aero-naval intranet network

Electronic Warfare

France: MINREM Sigint Ship Prime Contractorship

Services

We provide all programmes with the associated through-life support & services.

From a comprehensive, high perform

Optronics



Submarine visual systems
- optronic masts
- periscopes



Infra Red Search & Track



Surveillance and weapon aiming



Recce Pods

Electronic Warfare



ESM



COMINT



ECM

Communications



VLF, HF, V/UHF, HCDR, Software Defined Radio



MIDS L16, L11, L22



HF modems



Naval Lan, Communications management system, Terminals

Identification & Navigation



IFF interrogator-transponder



NavTac antenna



Naval TACAN



ance range of products...

Satcom



Modem



Stations

- Antennas
- T/R band X, C





INFORMATION DOMI

Above Water Surveillance Systems

The integration of optronics, EW and communication equipment, in conjunction with other sensors and modular mast raising equipment provides a comprehensive, customer specific submarine above water surveillance system.

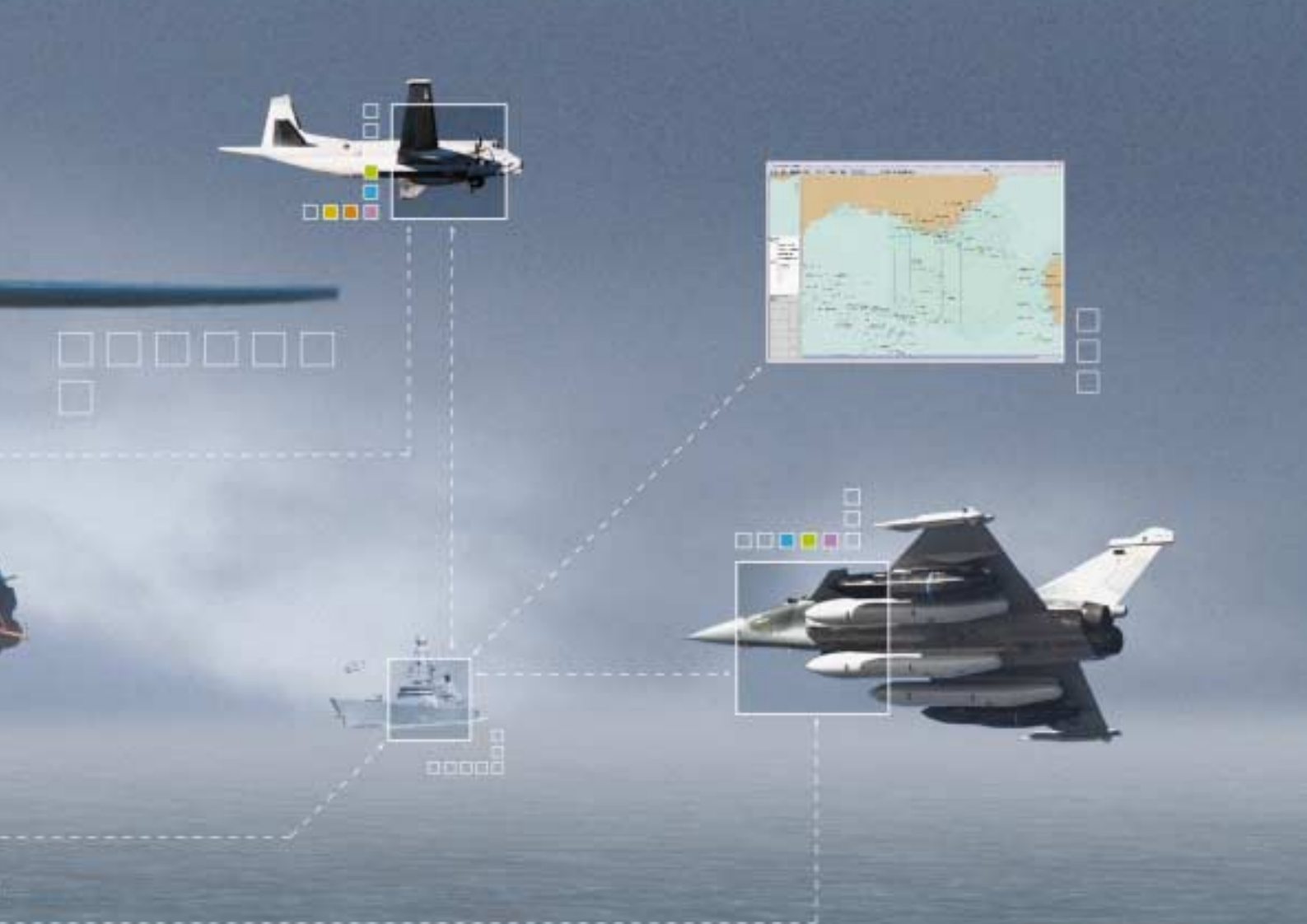
NETWORK ENABLED CAPABILITY

Fully Integrated Communications Systems

Organised around a multiservices information backbone, the FICS offers a full integration of all internal and external communications of a surface ship or a submarine with a global and centralised management.

Naval Ground Stations

As for surface ships or submarines, and using its full range of ground communications assets (VLF, HF, V/UHF, Sat-com, Tactical Data Links), Thales provides real FICS for Naval Ground Station.



...to tailored C4ISR system solutions

NANCE

Multi-sensor Image Interpretation and Dissemination

Already in service with the French and NATO forces, MINDS is an imagery processing platform that allows intelligence analysts to examine and share reliable, timely information with commanders and tactical users.

Command, Control, Information Systems

Scalable to any force organisation or command structure, Thales's, new generation naval command information system solution brings cost effective service quality and flexibility to every level of naval forces chain of command by leveraging COTS technology that meet interoperability, security and scalability requirements.

Tactical Data Link Networks

Thales has developed multi TDL and cost effective solutions with its Data Link Interface Processor (DLIP) product line. Associated with all types of radio/modem and the full range of TDL network management these solutions are fully adapted for navies.

Naval Force Intranet

Thales has developed multi-media networking solutions to support information exchange requirement of naval forces. These NEC solutions are based on federated and secured, full IP networks that optimise the use of the entire spectrum of legacy and future onboard radio communications means.

A local partner with worldwide capabilities

Land & Joint Systems Division



Key Figures

- » € 2.4 bn revenues
- » 15,000 employees
- » Operations in 20 countries
- » 30% of revenues invested in R&D

Thales

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