Thales designs and implements Naval Communication Systems for surface ships, as well as submarines. The systems are based on a combination of Thales inhouse developed soft- and hardware and commercially available technologies. A digital network, consisting of network nodes connected via fibre optical links, called focon IP (Fibre Optical Communication Network) provides the basis for all systems. Thales Defence & Security Systems GmbH has installed over 350 systems worldwide.

FICS – Fully Integrated Communication System

- FICS – Fully Integrated Communication Systems
- Ethernet backbone
- Comprehensive System approach to comply with new requirements & challenges of modern naval communication including Voice over IP (VoIP)
- Flexible design / modules to meet specific customer requirements
- Integration of all Communication Sub-Systems:
  - Distribution System
  - Communication Management
  - VLF, HF, V/UHF, SATCOM
  - Internal / Wireless Communication
  - Message Handling System
  - PAS / Entertainment System, etc.
  - PABX / GMDSS
  - Interfaces for LINK, Crypto, CDS, etc.
- Integrated Communication Antenna System
- Integrated Logistic Support

www.thalesgroup.com/germany
Thales developed a number of communication subsystems, such as wireless communication systems, Local Positioning System, Helicopter communication, as well as our recent development:

**ICAS – Integrated Communication Antenna System**
- The Integrated Communication Antenna System enables several communication & surveillance systems to be connected to the same antenna
- The form and shape improves the overall stealth capability of the vessel

**focon IP – Fibre Optical Communication Network**
Thales Defence & Security Systems GmbH has developed its Fibre Optical Communication Network into a focon IP system to offer IP-based services within its Naval Communication / Distribution System. Part of the development has been new Multi Media (Voice & Data) and VoIP terminals.

*focon IP – features*
- Multi-Service communication network (Voice & Data)
- Non-blocking transport of time-critical services
- Modular design / Standard interfaces
- Several security levels available
- Full integration of IP and Non-IP (legacy -) equipment

---

**Thales offers**
- Shipyard support for the Top deck Layout concerning antenna arrangement and interference with other equipment
- All major sub-systems can be supplied from the Thales portfolio of products
- Integration of non-Thales equipment, where customer preferences apply

---

**Thales Deutschland**  
**Defence & Security Systems**  
Edisonstraße 3 · 24145 Kiel · Germany  
Tel. +49 431 7109-0  
Fax +49 431 7109-531  
info.naval-comms@thalesgroup.com  
www.thalesgroup.com/germany