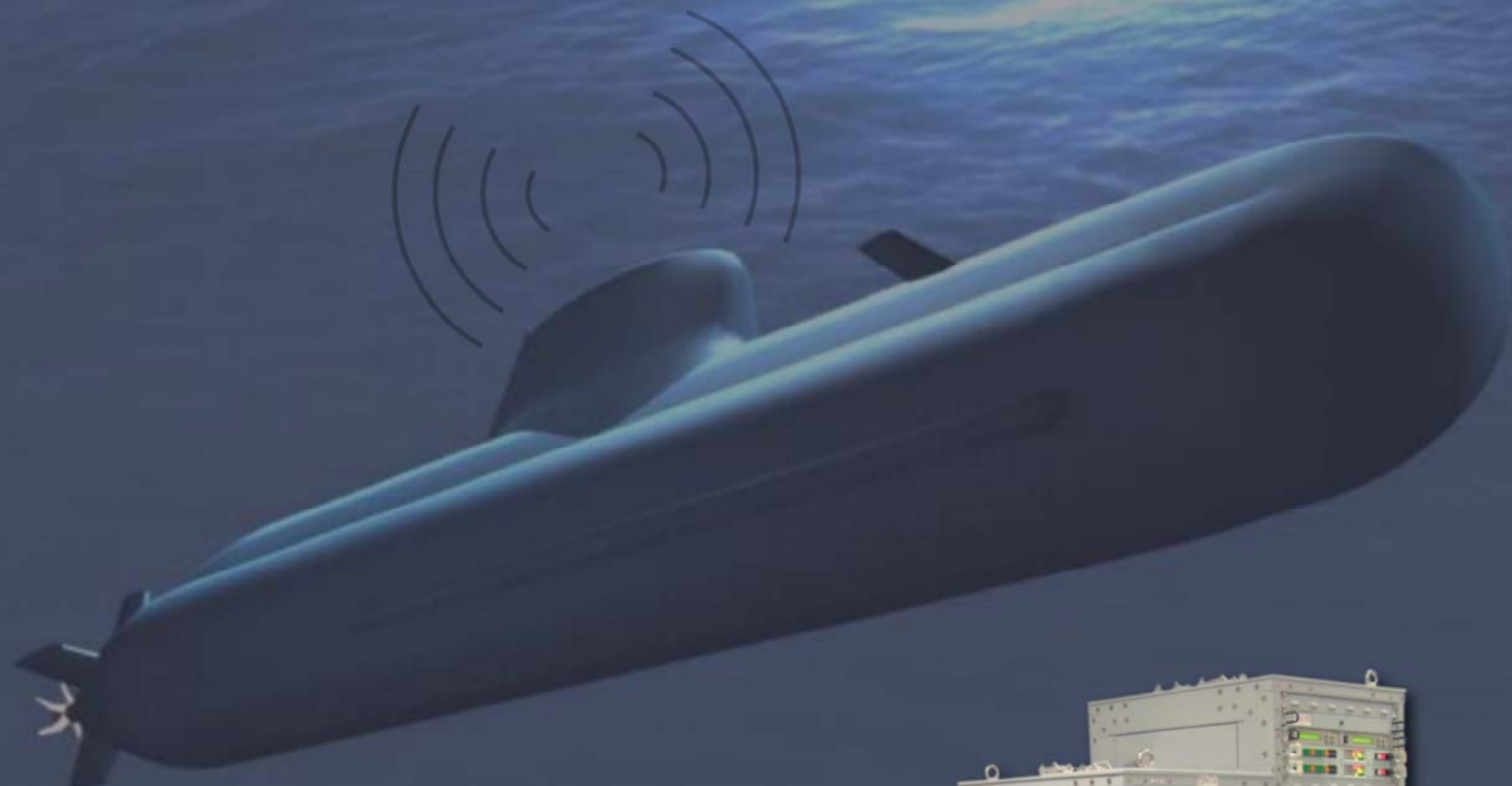


# Integrated Communications Systems

for submarines



# Integrated Communications System for Submarines

**SubICS** is a state-of-the-art, high performance **S**ubmarine **I**ntegrated **C**ommunications **S**ystem, meeting the most stringent requirements of such type of application. The system is the result of EID long term experience in the field of integration of warship communications. It includes all the equipment required to establish the different types of external and internal communication channels, namely radios (covering all the necessary frequencies bands), SATCOM terminal, antennae, buoys, modems, cipher devices, GMDSS equipment, Public Address System, Message Handling System, Sound Power Telephones and PABX.

Besides equipment/sub-systems selection and supply, EID carries out all the design and engineering activities required to provide a fully integrated, operational system. These include: system-boat and inter-system interface design (electrical and mechanical), power supply requirements, environmental aspects, room lay-outs, antennae arrangement, installation data and drawings, cable plans, setting to work, acceptance tests, integrated logistic support, cataloging and quality assurance plan.

**SubICS** also includes ICCS (Integrated Communications Control System), the core sub-system that glues together all the on-board communications equipment, thus enabling the automation of the external communication-related tasks, such as signal distribution (either secure or non-secure voice and data) between users and equipment and equipment remote control and monitoring. Wideband audio signals distribution, like Sonar, is also available.

ICCS also provides powerful internal communication capabilities including point-to-point and conference circuits. Compact, easy to use, voice terminals enable simultaneous access to internal and external communication channels. Special facilities such as group calls and programmable priority break-in are implemented as well.

The system features a centralized control, with an appealing human interface, providing a highly efficient management of the on-board communication resources and requiring a minimum of skilled personnel. A connection to the Combat Direction System is available upon request, to enable the transfer of information between both systems.

Most of the SubICS equipment is housed in consoles and cabinets specifically designed to match the severe space and environmental constraints prevailing aboard submarines. In addition, the overall system complies with demanding requirements, namely:

- Shock standard BV043
- EMI/EMC MIL-STD-461
- Airborne Noise Requirements
- Structureborne Noise Requirements



This publication is issued to provide outline information only. We reserve the right to alter the specification and design of the equipment without previous notice.



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