



SCORPENE® 2000

Combat-designed oceanic submarines

CONVENTIONAL ATTACK SUBMARINES (SSK)

Missions

Scorpene® 2000 submarines design takes into account the requirements of war time and of far and long deployments. This includes the large and varied underwater weapons payload, the unrivalled acoustic advantage, the hydrodynamic shape and detection means fitted for high speeds, the redundancy and reliability of main equipments.

Scorpene® 2000 submarines fulfil the entire scope of missions of modern multipurpose submarines:

- anti-surface and anti-submarine warfare,
- integration in a naval force,
- special operations,
- intelligence gathering,
- offensive minelaying,
- area surveillance and blockade,
- strikes against land-based objectives.

Scorpene® 2000 can perform these missions during peace time, crises or war time both in shallow or blue waters.



LARGE PAYLOAD

POWERFUL INTEGRATED COMBAT SYSTEM

UNRIVALLED SEA-PROVEN ACOUSTIC ADVANTAGE, INCLUDING AT HIGH SPEEDS

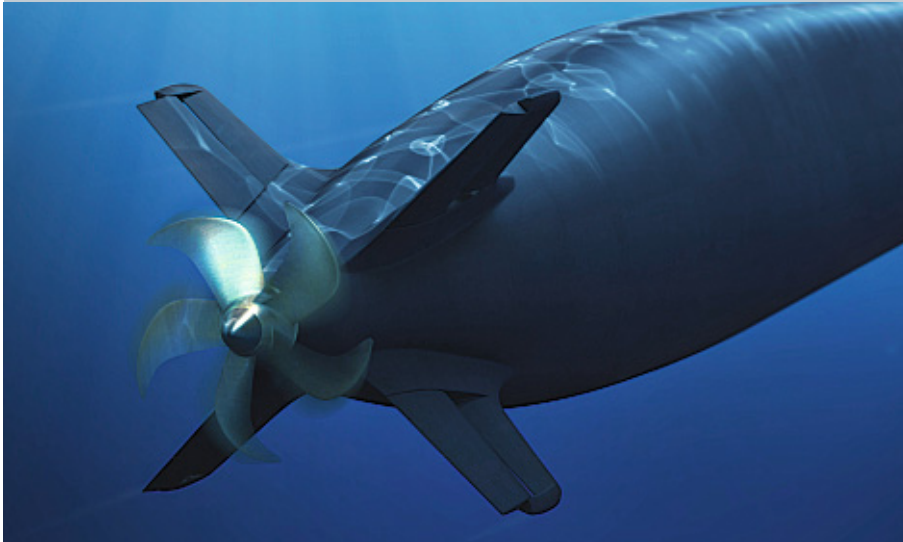
REDUCED MANNING AND LIFE-CYCLE COSTS

MODULAR DESIGN TO MEET CUSTOMERS' NEEDS

BEST INDISCRETION RATIO

AVAILABLE WITH SUBMERGED AUTONOMY BOOSTING SECTIONS

KEY POINTS



Scorpene® 2000 with X-rudders.

**LOWEST INDISCRETION
RATE ON THE MARKET**

**SUBMERGED AUTONOMY:
> 3 WEEKS WITH AIP**



Compact MESMA® AIP section.

Increasing invulnerability

Scorpene® 2000 submarines are designed to reduce time spent at periscope depth. Releasable or towed systems allows communications, intelligence and navigation data updating while remaining deeply submerged. Scorpene® 2000 also offers the lowest indiscretion rate on the market.

Even this may not be sufficient for some customers. DCNS proposes three “submerged-autonomy boosting sections”. Completely autonomous, these sections can be added or taken out during submarine’s life. They don’t require a specific fuel.

■ **sea-proven MESMA®**, using a technology mastered by DCNS for decades,

■ **FC2G - Fuel Cell 2nd Generation**, offering the best submerged endurance. They considerably reduce the logistic costs and constraints of first-generation FC,

■ **lithium-ion batteries**. Rechargeable at sea, they allow more than one week submerged at low speed, and very good performance at high speed.

Integrated combat system

The SUBTICS® fully integrated combat system gathers all the information from the sensors or data links in order to build a comprehensive picture of the tactical situation and to deploy the appropriate weapons.

Besides a high quality sonar suite and several above-water sensors, the combat system includes a fast, silent and safe weapon handling and launching system – enabling the loading of any launching tube with any weapon at any time. Scorpene®2000’s 18 weapon payload is the best on the market and able to launch torpedoes, missiles or mines.



SUBTICS® combat system consoles.

CHARACTERISTICS

Length, overall	66-82 m
Displacement surfaced	1,550-2,000 t
Displacement submerged	1,800-2,150 t
Submerged speed	> 20 kts
Submerged endurance	> 3 weeks
Diving depth	> 350 m
Autonomy	> 50 days
Crew	25 to 31

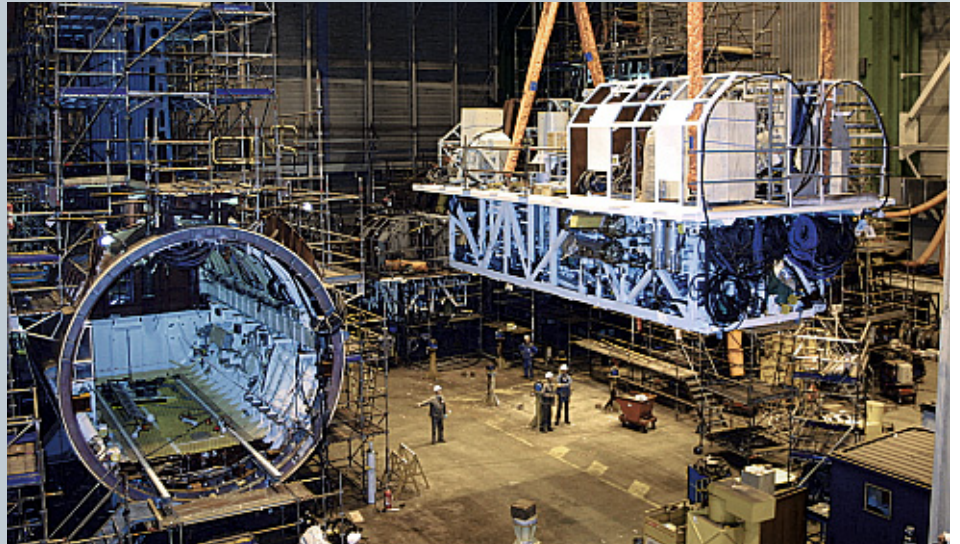
KEY POINTS

Unrivalled sea-proven acoustic advantage

Vibration-free machinery and elastic mountings on suspended cradles ensure excellent acoustic discretion. Thanks to its pure hydrodynamic shapes, to the sensitivity and fine integration of the sonars, Scorpene®2000 has proven at sea its listening capacities up to maximum speed.

Tailoring design to customer needs

Scorpene®2000 submarines combine modular design, an efficient basic layout and sea-proven technologies. The final design can be tailored to accommodate each client navy's specific needs and capability requirements as well as new capacities or technologies developed recently.



Fully-equipped cradles.



Life-cycle costs Transfer of technology

Scorpene®2000 radically reduces the cost of operating and maintaining a submarine fleet. Life-cycle costs have been slashed by reducing alongside maintenance time and extending the interval between overhauls.

Furthermore, DCNS is open to partnerships and transfers of technology with local shipbuilders and industries, enabling them to provide through-life support, to supply equipment and software or undertake shipbuilding work depending on the procurement agency's objectives. The constant aim is to give the customer navy the independence and long-term viability for the force maintenance.



PAYLOAD
18 HEAVY-WEAPONS

MINIMUM CREW
25 PERSONS

SCORPENE® 2000



➔ Satisfied customers

- **Chile:** two submarines at sea.
Building place:
Cherbourg (France), Cartagena (Spain).
- **Malaysia:** two submarines at sea.
Building place:
Cherbourg (France), Cartagena (Spain).
- **India:** six submarines under construction.
Building place (by transfer of technology):
Mumbai (India).
- **Brazil:** four submarines under construction.
Building place (by transfer of technology):
Itaguai (Brazil).

