Belonging to the D19 UUV family, the new D19-T represents the latest underwater mobile target generation, offering high endurance and capable to cope with modern sonars and torpedoes.

Thanks to its experience in underwater mobile target, DCNS offers a comprehensive and modular Anti-Submarine Warfare (ASW) training solution combining tactical realism and ease of use. It guarantees the “train as you fight” concept without resorting to a real submarine, thus reducing the cost of training.

The comprehensive solution is composed of:

- the D19-T underwater mobile target,
- underwater stationary target,
- underwater portable tracking range,
- preparation and analysis tool.
**Main features**
The D19-T behaves exactly like a submarine regarding endurance, speed, acceleration, manoeuvrability and diving performance. It includes a sonar system along with a towed array fitted with hydrophones to emulate the acoustic signature of a real submarine. Such an equipment is the only capable to avoid the mobile target being classified as countermeasure by the modern torpedoes during their engagement phases.

The pre-programmed “mission” software enables the target to emulate all phases of a submarine mission (patrol, escape, etc.) in order to ensure that each exercise is highly realistic.

**Multi-purpose**
The D19-T can be used for:
- underwater detection and tracking by sonar operators of any ASW platform for open water training (submarines, surface vessels, helicopters and MPA),
- torpedo launching trials.

**User-friendly**
- Easy launching and recovery from any surface vessel by crane or launching ramp,
- easy loading and recovery of mission data before and after an exercise (through-the-skin download system),
- easy recharging of the Li-ion battery (through-the-skin recharging system).

**CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter / length / weight</td>
<td>533mm / &lt; 6,000mm / &lt; 1t</td>
</tr>
<tr>
<td>Energy</td>
<td>Li-ion battery</td>
</tr>
<tr>
<td>Depth</td>
<td>&gt; 300 m</td>
</tr>
<tr>
<td>Endurance</td>
<td>&gt; 30 h</td>
</tr>
<tr>
<td>Speed</td>
<td>From 0 to &gt; 25 kts</td>
</tr>
</tbody>
</table>
ASW comprehensive training package
Together with the D19-T mobile target, DCNS offers a modular anti-submarine warfare training solution. Based on their needs, navies can acquire either the full solution directly or progressively, or decide to only acquire a part of the training package. DCNS also offers partial or full assistance for ASW training.

PREPeration & ANalysis tool
The PREPAN software enables the creation of:
- underwater environment,
- tactical scenarios,
- any surface vessel,
- any submarine,
- any torpedo.
It is used for pre-exercise preparation and post-exercise analysis.

Portable tracking range
The portable tracking range is used for real-time underwater and above water positioning and tracking. The range is composed of a set of buoys that receives acoustic signals transmitted by the targets and the torpedoes. Easy to store and deploy from any surface vessel, the range is constituted by 4 to 12 buoys for a coverage up to 100 km². A control and display unit installed on board or ashore allows real-time supervision and replay.

Stationary target
The stationary target has approximately the same characteristics than the D19-T mobile target, without the mobility and the tail. It can be used either to replace the D19-T mobile target for more simple training or in combination with the D19-T for more complex scenarios. The stationary target can be used also as countermeasure such as a jammer.
The D19-T mobile underwater target is part of the D19 UUV family. The D19-T is the latest version of mobile underwater target developed by DCNS to match successive French Navy torpedo programmes (F17, MU90 and F21). Over the last twenty years, hundreds of at-sea exercises and trials have been conducted using DCNS mobile targets. Today, the French Navy uses the DCNS Anti-Submarine Warfare comprehensive training package and full assistance to conduct its ASW exercises.