Challenge at sea: Italy seeks naval power to match strategic need

The Italian Navy is emerging as a prominent European naval power, very active in its local region but also supporting wider international security requirements. Yet its force levels are in steady decline. Luca Peruzzi assesses current operational output and considers how a number of new platforms will increase future capacity.

As the Mediterranean Sea grows in strategic importance in maritime and wider security terms, so is the position of the navies operating therein becoming more prominent.

Policy context

The Italian Ministry of Defence (MoD) unveiled its latest white paper in April 2015. One of the prominent features of the document was its definition of the geographical areas in which Italy's armed forces will operate in the future. As well as stressing the importance of securing Italy's national borders including at sea, the white paper highlighted the Mediterranean Sea and
European areas of the Atlantic Ocean as being of vital national strategic interest. It underscored the importance of the Mediterranean region in particular, stating that "gaining an elevated level of stability and democratic development in the countries that [border] on the Mediterranean basin represents the priority objective of our country". Achieving this aim also would require improved military co-operation with countries within this region, it said.

However, it also noted that the Mediterranean region "is not a closed system" but one of course influenced by the politico-strategic dynamics of adjacent regions. Thus, Italy's efforts to strengthen security therein would be shaped by events in other areas the white paper referred to as being "of particular interest", including countries east of Egypt (such as Syria, Iraq, and Jordan); the immediate sub-Saharan region of Africa, stretching across the continent from West to East; the Horn of Africa; and the Gulf.

Beyond these immediate areas of geostrategic interest, the white paper also stated that Italy would participate in civil protection, crisis management, and stability operations further afield.

Against what is a continually evolving security context, the Italian Navy has been conducting a wider range of roles in a wider range of operations. "In the last 10 years, the Italian Navy has been engaged in all sorts of maritime operations in the wider Mediterranean region: some conventional, as in the case of the Libyan crisis in 2011; and some related to maritime security, such as the counter-piracy operations in the Horn of Africa; [these have been] interweaved with humanitarian operations, as in the recent cases of [Mediterranean migration] operations 'Mare Nostrum' and 'Mare Sicuro'," the navy's previous chief of staff, Admiral Giuseppe De Giorgi, told IHS Jane's in an interview before he handed over command of the service in late June 2016.

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Italian Navy FREMM frigates at La Spezia. A total of 10 are to be procured. (Italian Navy)

**Legge Navale**

The drastic reduction in ship numbers and operational capabilities, the need to sustain naval shipbuilding and wider defence industrial skills and capacity, and the navy’s key contribution in countering the range of security emergencies developing in the Mediterranean region pushed the Italian Parliament to take significant corrective action and approve the Legge Navale at the beginning of 2015. Under the plan, EUR5.4 billion (USD5.7 billion) of extraordinary funding is being provided by the Ministry of Economic Development. The funds will allow the navy to acquire an initial batch of seven new multirole Pattugliatori Polivalenti d’Altura (PPA) offshore patrol vessels (OPVs), one logistics support ship (LSS), one landing helicopter dock (LHD) vessel, and two Unità Navale Polivalente Altissima Velocità (UNPAV) high-speed special forces operations support vessels.
The navy has ordered seven of a possible 10 PPA OPVs. The platforms have been designed with high flexibility and low cost in mind. (Italian Navy)

Adm De Giorgi underscored the importance of this first batch of acquisitions, but added that “further investments are needed ... to replace critical capabilities such as submarines, rescue ships, and minehunters”. The navy also needs additional LHDs and LSSs.

Speaking at the recent UDT 2016 undersea defence and security conference in Oslo, head of the navy's submarine service Rear Admiral Dario Giacomin said that investment in the first phase of the naval law is focused on surface ships, where there is most need currently due to risk of a capability gap opening up.

Under the first phase, up to 10 PPAs will be procured - an initial step towards the navy's aim of developing a 16-unit class that will replace 24 existing destroyers, frigates, patrol ships, and corvettes.

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Structures and operations

Despite the challenging budgetary times, for several years the navy has been working to improve its operational outputs, including through re-aligning its organisational structures. Back in 2012, it launched a radical structural and staffing reorganisation process, designed to rationalise functions and command structures, with the aim of providing more manpower and improved support to the operational commands.

The navy has identified three main functions within its output structure: operations, logistics, and education and training. These outputs are organised respectively under the fleet, logistics, and schools commands. The chief of staff is responsible for the navy's special forces, diver, and hydrographic capabilities.

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International operations

Since the turn of the millennium, the navy has deployed surface ships and submarines to maintain a presence in the Horn of Africa region in support of international counter-piracy campaigns, contributing both to NATO's 'Ocean Shield' and the EU's 'Atalanta' operations. For example, earlier
in 2016 the FREMM frigate ITS Carabiniere returned from a six-month deployment supporting 'Atalanta' where, as the operational flagship, the vessel embarked a multinational command staff. The frigate also deployed to West African waters.

Navy units also have been operating in the Gulf since the early 2000s. Recently, between November 2013 and April 2014, a task group consisting of Cavour, lead FREMM frigate Carlo Bergamini, and the Comandante-class OPV ITS Comandante Borsini, with Etna providing replenishment capacity, conducted a circumnavigation of the African continent after sailing across the Indian Ocean to the Gulf. The purpose of the deployment was to support capacity-building and diplomatic presence requirements, to provide training and operational opportunities with regional navies, and to deliver humanitarian assistance ashore in Africa.

The navy maintains a personnel presence within the Combined Maritime Force (CMF) headquarters in Bahrain. San Marco and special forces detachments have deployed to Afghanistan, under Operation 'Resolute Support', and Iraq, under Operation 'Inherent Resolve', in both instances to train and support local armed forces.

Below the surface, U212As have deployed to the west coast of the United States to train with US Navy (USN) carrier strike groups and nuclear-powered attack submarines (SSNs). As a result of this training activity, the two navies drew up a memorandum of understanding (MoU) enabling USN SSNs to conduct training operations with Italy's SSKs when the former are operating in or transiting through the Mediterranean.
The navy's two Andrea Doria/Horizon-class destroyers. Lead ship ITS Andrea Doria (foreground) became the first Italian Navy ship to successfully exchange data over a secure, dedicated ballistic missile defence network during the October 2015 At-Sea Demonstration (ASD15). (Italian Navy)

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The Horizon destroyer ITS Andrea Doria firing an Aster 30 missile to engage a surrogate conventional anti-ship missile threat, during the ASD15 demonstration. (Italian Navy)

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Mediterranean experience

Along with contributing to the Libya campaign in 2011 and sending assets such as its submarines to support NATO's Article V counter-terrorism operation 'Active Endeavour', the navy has been at the forefront of international maritime operations in the Mediterranean. Most notable has been its contribution to the maritime migration crisis, an involvement which began in October 2013 with its national tasking under Operation 'Mare Nostrum' and today includes commitment to the EU's
Operation 'Sophia' and to NATO operations, as well as its own continuing national contribution under 'Mare Sicuro'.

"The Italian Navy, being at the forefront of the recent Mediterranean operational crises, has gained significant experience in dealing with a complex environment and a growing number of tasks, from military to humanitarian missions," said Adm De Giorgi.

Italy has found itself at the geographic and political centre of the current maritime migration crisis, as the international community moves to tackle the situation at sea. The navy has taken a lead role in this activity, working with other national services and government agencies as well as with assets and personnel from other countries.

The navy has almost 900 sailors deployed at sea every day on this tasking, onboard five ships: an LPD acts as a flagship for the operation and as a logistics hub for four other platforms drawn from the navy's frigate, corvette, and OPV flotillas. Coastguard vessels are also involved, along with a range of shipborne helicopters, unmanned air vehicles, and land-based air assets drawn from the navy, coastguard, air force, and other agencies. The navy's submarines have made a unique contribution to this tasking: as Rear Adm Giacomini told the UDT audience, their covert stealth has enabled them to provide surveillance imagery that has been used to tackle the activities of the human traffickers.
During just over a year of operations under 'Mare Nostrum', Italian Navy assets rescued almost 150,000 people in over 400 SAR taskings. Nine motherships and 366 traffickers were seized. After 'Mare Nostrum' concluded and as the security situation in Libya deteriorated, the increasing flow of migrants across the Mediterranean saw Italy stand up a second national operation, 'Mare Sicuro', in March 2015. The operation is focused on the central Mediterranean region in particular, and is seeking to deter and counter illegal trafficking, to maintain safety at sea, to protect resource platforms and fisheries activities, and to conduct SAR taskings. The navy plays a particular part here in collecting information on traffickers’ networks and operations. It has been contributing up to five platforms as well as helicopters and unmanned systems, as it covers a 78,000 sq n mile area east to west across the Libyan coast (although not within Libyan territorial waters).

An Italian Guardia di Finanza patrol ship supporting the EU's migration operation 'Triton' transports rescued migrants towards Lampedusa, southern Italy, in May 2015. A range of Italian government maritime security agencies have been contributing to the international migration operation in the Mediterranean Sea. (Press Association Images)

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Programme update

Set against the evolving strategic and operational context and the enduring budget challenges, Adm De Giorgi argued that the future fleet plans will deliver capabilities designed to balance such requirements. For example, the PPAs - as well as delivering speed, endurance, and the modularity and flexibility required to meet a range of defence and wider national security tasks - are designed
to deliver "notable savings [through] low cost of production, high operational modularity, enhanced cost management, and reduced crew", said the admiral. He noted too the focus on developing a design that enables the easy integration of new capabilities.

Across the first phase of the Legge Navale, all three ship types being delivered are being designed with reconfigurable areas intended to accommodate a range of systems able to meet a range of tasks. All have enhanced capacity to support HADR missions, with the ability to supply materiel, water, and electrical power ashore. The three ship types will also share the same new generation of indigenous combat, sensor, and weapons systems. Many of these systems are being designed with the aim of reducing manpower requirements.

The three ship types are also being built by the same industrial consortium, with Fincantieri as prime contractor and including Leonardo (formerly Finmeccanica) as the sub-contractor for the combat system, integration, and primary weapon and sensor system supplier. The contracts cover 10 years of maintenance, spares, training, and documentation support.

"The decision to assign the PPA and LSS procurement programmes to [European defence procurement agency] OCCAR, acting on behalf of the Italian MoD as the main procurement body, will facilitate the development of the two programmes from a contractual prospective and third customers' participation, as demonstrated by the joint French-Italian FREMM programme," said Admiral Matteo Bisceglia, head of the MoD's naval armaments procurement directorate. Such integration is designed to generate the best output for the navy.

According to the latest plans, the seven PPAs will be built in three versions: Light (two ships), Light Plus (three), and Full (two), with the differences defined by the sensor and weapons fit. The ships will be delivered in 2021-26, with the first "Full" variant arriving in 2024.

The double-hulled LSS will be the first vessel to be delivered, arriving in 2018 and bringing enhanced capacity to support expeditionary operations.

The LHD will provide "a major boost to the Italian amphibious component and at the same time will enhance the inherent HADR capability", said Admiral Antonio Natale, former head of new ship development in the naval staff. The 230 m platform can carry a crew of 450 and up to 550 embarked troops, has 1,200 lane metres of vehicle space, and a well dock able to accommodate up to four 60-ton landing craft mechanical (LCMs), amphibious vehicles, and landing craft air cushion (LCACs).

The two UNPAV special operations support vessels from Intermarine also provide a new capability for the navy. The 150-ton, 40 m composite-build vessels can embark two high-speed boats and unmanned aerial vehicles, as well as hosting around 20 special forces operators for extended periods.

The LSS and LHD will be fitted with the Strales/Davide close-in defence system, which is based around a 76/62 mm Super Rapid gun. The system is already deployed on Cavour and on the FREMM frigates, and is to be fitted to the two Horizon frigates. The PPAs will receive a lighter, non-deck penetrating, version with the same guided munitions capability.

New sensor developments include an X-/C- dual-band radar on board the PPAs, integrated with an enhanced version of MBDA Italy's Aster 30-based Extended Self-Defence (ESD) air-defence missile system. Italy is also participating in the Aster 30 Block 1NT development programme,
designed to deliver a weapon with improved capability for countering tactical ballistic missile threats. Italy’s intent is to equip army and navy units with this capability.
Oto Melara’s 127/64 LW gun, seen during firing trials on board lead FREMM frigate ITS Carlo Bergamini, is able to fire Vulcano 127 mm extended-range guided rounds. Full acceptance of this capability is expected in 2016. (Oto Melara)

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The Italian Navy’s new Type 212A Todaro-class AIP-capable submarine Romeo Romei preparing for launch in 2015. The navy is hoping to make a case for increasing its submarine force level from four to six boats. (Luca Peruzzi)

Aviation at sea

In the air, the most notable development is the planned arrival of 15 Lockheed Martin F-35B Lightning II short take-off/vertical landing (STOVL) Joint Strike Fighters, to be deployed at sea aboard Cavour and ashore at Grottaglie naval air station. They will replace the in-service AV-8B Harrier II+. 
Other recent developments of note include the acquisition of 46 SH-90A helicopters, the maritime patrol variant of the NHIndustries NH90, fully fitted for ASW and anti-surface warfare (ASuW) missions, and 10 SH-90B airframes, an enhanced variant of the Tactical Transport Helicopter configured for shipborne operation in support of amphibious and special forces missions. The end of 2016 is expected to see the delivery of the 26th SH-90 airframe.

The navy's 22 Leonardo/Finnmeccanica EH-101 helicopters are fitted for maritime patrol, early warning/C2, and amphibious support/utility operations. There are plans being developed to implement a mid-life upgrade programme. The navy's maritime patrol capability also will be boosted with the delivery of four P 72A aircraft, replacing the in-service Atlantic 1; delivery of the first airframe is expected in 2016.

People

To meet enduring and emerging personnel education requirements, the navy has established a new Schools Command, based in Ancona. The command has responsibility for personnel selection, training, and education across the country, including at the Naval Academy in Leghorn. Alongside an increase in shore-based simulation training requirements, the command is re-aligning young officer training to better prepare personnel to meet today's evolving and emerging at-sea operational requirements.
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