

DIMENSIONS OF THE CATALAN DEFENCE FORCES I: NAVAL FORCES

Preliminary considerations

This document is not a final blueprint on the dimensions and hardware of the future branches of the Catalan Defence Forces, but an outline proposal, flowing from previously published documents, in particular “A Strategic Analyses” and “Military Doctrine: Development of Our Own Model”. Since we do not want to speculate either on the outcome of the negotiations on defence assets to be inherited by Catalonia, or on the Spanish military personnel that may wish to join the Catalan Defence Forces, this document only takes into account the real estate assets owned by the Spanish Defence Ministry and located in the Principality of Catalonia. The text starts from scratch concerning hardware and personnel. Officer training will also be a factor having an impact on the process. Training soldiers and sailors, as well as junior officers (up to OF-3), may be a relatively easy goal if one has the suitable resources. However, it takes more time to fill certain MOS¹ slots and to train staff officers and higher-ranking leaders. It is not just a matter of passing a number of courses, but also of acquiring essential experience in the tasks pertaining to each rank and speciality. Given the wish to avoid duplicities and redundant capabilities, the Catalan Defence Forces will have a single Joint Chiefs of Staff, bringing together elements from the three forces (land army, air force, and navy). We will not refer to the support civilian personnel (administration and services), since it is difficult to discuss its volume in a document of this length and level.

The Naval Force

Starting from scratch

Catalonia's huge dependence on the sea (please refer to “A Strategic Analyses”) makes it imperative for us to work on this domain from day one. Having said that, we find that the Principality of Catalonia, despite being home to two large ports such as Barcelona and Tarragona, has no naval bases (you may have a look at the Spanish Navy's website). This is, however, no obstacle to reach the first of our goals: controlling territorial waters and the EEZ (Exclusive Economic Zone). We will certainly go through a first few years in which we will have to improvise with the available resources and personnel. In all likelihood, the Mossos d'Esquadra (Catalan Police) and local and harbour police forces will have to join forces in some sort of temporary maritime security agency. However, in spite of the temporary nature of this agency, which we just mentioned, it is necessary to quickly set up the Catalan Naval Academy. To begin with, we must train a core of officers and NCOs (non-commissioned officers), both to give rise to the first cohort of instructors and also to fill operational posts. It will thus be necessary to reach some sort of agreement with another state² to train this core.

In parallel to generating this core, it would be necessary to build the site of the Naval Academy. Personnel and facilities should be ready in no more than three years. We must also say that

1 Military Occupation Specialities.

2 Both because of its proximity and, above all, experience, the United Kingdom would be the best option.

instructors will fill operational slots on a rotating basis, thus guaranteeing a two-way transmission of training and experience. At first, the Naval Academy should combine the initial core with foreign advisers in the more specialized fields, but the mid and long-term goal is to have all training staff come from the Naval Force itself.³

The first operational unit to set up during the stage which this report deals with is the Littoral Patrol Command. Its functions will be:

- Defence of territorial waters.
- Protection of harbour infrastructures.
- Control of illegal maritime activities (smuggling, drug trafficking ...).
- Search and rescue at sea.
- Support in catastrophic events (such as a toxic spill).

In order to carry out these roles, it will need the following components:

- Command and Control Centre.
- 3 or 4 offshore patrol vessels (OPV).⁴
- 2 or 3 fast patrol crafts (FPC).⁵
- 4 to 6 unmanned air vehicles (UAV).
- 4 to 6 unmanned surface vessels (USV).⁶
- An ocean-going tug.

The Command and Control Centre (C2) will receive, process, and distribute the information arriving from different vectors, in order to respond to any contingency as quickly as possible. It will directly control unmanned surveillance systems (UAV and USV), with the possibility of transferring control over them to the offshore patrol vessels (OPV). Concerning these ships, the figure provided is based on the need to constantly keep at least one on patrol. It is not just a matter of guaranteeing the deployment of one unit at all times, but also of making it possible for the Naval Academy's students to have a training platform constantly at hand. While the FPC may seem to overlap with

³ Without this being a bar to naval exchanges with other countries.

⁴ Concerning Offshore Patrol Vessels, we should remember that they will not just operate in Catalan territorial waters and adjacent zone, but also in the country's Economic Exclusive Zone. An example could be the Adroit class, displacing 1,450 tons.

⁵ With regard to Fast Patrol Crafts, there is a wide range of possible models. For example, classes like Israel's Dvora (45-60 tons) or Norway's Skjold (274 tons) would fit with our needs.

⁶ Re Unmanned Surface Vessels, one can well employ them to conduct the most routine-like tasks of patrolling ports and their entry and exit channels.

the OPV, they would be reserved to tasks requiring a quick reaction, for example intercepting fast craft or assisting vessels in need of immediate help. Concerning unmanned systems, both aerial and naval, the figure provided is based on the essential need to enjoy a constant surveillance of territorial waters. We should mention that progress in robotics in Catalan industry and universities would guarantee a lesser degree of dependency in this field. Also, robotization enables personnel savings. Finally, the ocean-going tug will be responsible both for assisting large ships and for deploying protection systems against toxic spills.

This first stage, which may take us some 10 years since independence, will ensure not just the “first stepping stone” for our Naval Force, but also the necessary know-how to launch the ensuing stages. We estimate that, taking together the Naval Academy, the Littoral Patrol Command, and the shore-based services personnel, the overall volume of manpower will be around 600 officers and sailors. In administrative terms, the Naval Force will be divided into three sectors: South (Tarragona and Ebre Region), Central (from Garraf to Maresme Counties), and North (from Selva to Alt Empordà Counties). These sectors have no “jurisdictional” meaning, a Barcelona-based ship may patrol the Ebre Delta if she is tasked with that job.

The Mediterranean

Having ensured the control over our territorial waters⁷, we must make a leap, both in quantitative and in qualitative terms. As explained in our two previous documents, the Mediterranean is our strategic environment. Fortunately, we share the bulk of our strategic interests with European Mediterranean countries, allowing us to pool efforts to ensure collective defence, saving resources. Referring to the maritime domain in particular, the main stability guarantee is the SNMG2 (Standing NATO Maritime Group 2; formerly Standing Naval Force Mediterranean), a component of the NRF (NATO Response Force). In addition to the permanent deterrence capability that it entails, in peace time the SNMG2 also has a capacity to engage in MOOTW (Military Operations Other Than War), such as the fight against piracy. At the same time, it amounts to a framework for joint cooperation on training and to improve interoperability. To a lesser extent, it would also be convenient to participate in the SNMCMG2 (Standing NATO Mine Countermeasures Group 2). In naval history, mines have amounted to a most serious threat. Even today, they are an attractive low-cost alternative, within reach of hostile states and terrorist groups. Given the volume of maritime traffic in the Mediterranean, a guarantee is needed that it will be possible to quickly put an end that that threat if it emerges. Having said that, as is the case in all international institutions, enjoying their benefits also involves duties. In order to be able to participate in the above mentioned institutions, we shall need to set up another division within our Naval Force: the Escort Command.⁸ Its functions will be:

- ASW (Anti-submarine Warfare)
- ASuW⁹ (Anti-Surface Warfare)

7 Something which, let us stress this, is also a duty towards the international community, since we cannot expect any kind of recognition unless we take charge of the security and defence of our territory.

8 We are using the term “Escort” in a wider sense than just anti-submarine warfare. We are employing the concept as defined by Japan's Maritime Self-Defense Forces when referring to its destroyer flotillas.

9 Our strategic environment means we should not be thinking about a conventional clash between surface units, but

- AAW¹⁰ (Anti-Air Warfare)
- MOOTW (Military Operations Other Than War)

In order to carry out the above roles, the Escort Command will need the following assets and personnel:

- Naval Operations Headquarters: 200 officers, sailors, and other ranks.
- 3 to 4 multi-role corvettes: with a company of 360.
- Auxiliary Fleet: 300 personnel.

The Naval Operations Headquarters implies a step forward, on top of the Littoral Patrol's Command and Control Centre. In addition to the above mentioned tasks, it will also be responsible for planning and monitoring deployments. It will do this in coordination with the Allied Joint Command Naples. Nobody is oblivious to the fact that, at this stage, we will already need senior and staff officers. Obviously, with a 10-year experience under its belt, the Naval Academy will already be able to start offering these courses, without prejudice to the possibility of personnel taking other courses at foreign academies.

The acquisition of corvettes, rather than large surface combatants such as frigates and destroyers, flows from the will to give our forces a dimension in line with a realistic conflict assessment. Also, the characteristics of this kind of ships¹¹ make them more easily adaptable to a large portion of Catalan harbours, without the need for any additional construction work other than that necessary to adapt and redistribute the available space.¹²

Concerning the Auxiliary Fleet, it is not at all something superfluous. If, as explained, we want to take part in SNMG2, it will be necessary for our units to spend long periods at sea. They cannot spend time going to and from our ports to resupply. Just like our corvettes may be supplied in the high seas by our Allies, we will also have to supply their ships, out of a pure logic of reciprocity among Allies. The ships that we will have to acquire are a fleet tanker¹³ and a logistics ship.¹⁴

rather about asymmetric conflicts. In this regard, it will be necessary to make a big effort to prepare against “swarm attacks” carried out by fast craft.

- 10 While the possibility of facing aerial attacks in the Mediterranean is almost non-existent, we should not forget that anti-ship missile proliferation is a serious threat. As an example, let us remember Hezbollah's 2006 attack against an Israeli corvette using a C-802 missile, or the Argentine attack with a shore-based Exocet missile against HMS Glamorgan in the 1982 Falklands War.
- 11 80 to 100-meter long, displacing no more than 1,000 – 1,200 tons, and with a 3-meter draught. An example would be Sweden's Visby class.
- 12 We should not forget, on the other hand, that ship-maintenance companies in Catalonia are geared (with a single exception), at most, towards the field of yachts.
- 13 These tankers are usually called “fleet tankers”. They differ from conventional tankers because they are designed to refill moving ships. Such operations require complex technology and training, since the vessels involved must stick to parallel courses while sailing a very short distance away from each other. It is unthinkable to resupply ships at rest, since the rule is not to make things easy for the enemy.
- 14 We can refer to the same considerations as with fleet tankers. In this case, however, the logistics ships must be multi-cargo, able to transport supplies, spare parts, munitions ...

We have also mentioned the SNMCMG2. We prefer to leave the door open in the debate on whether to participate or not, because of the progress in the field of multi-role ships, which thanks to modular systems may have different configurations for particular missions.¹⁵ What our Naval Forces must absolutely have are EOD (Explosive Ordnance Disposal) teams, ready to defuse explosive charges placed on ships. On no account are we trying to usurp the role of Land Forces units specialized in this field, but we have to take into account the complexity involved in undertaking such tasks on board a ship or under water.

Our estimates lead us to conclude that, on completing this stage (in between 10 to 15 years), our Naval Force should expand by an additional 1,100, reaching a total of 1,700 officers and sailors. Having said that, by that time we will have been able to implement a reserve. This will make it possible to expand and contract the Naval Force's personnel in accordance with its needs. Of course, it will also facilitate a reinforced connection between society and the military.

The Atlantic and the Indian Oceans

Certainly, all scenarios beyond the limits marked by Gibraltar and Suez may seem alien to us. However, once we have consolidated the defence of our territorial waters and our presence in our most immediate area of strategic interest, that is the Mediterranean, in a 10 to 15 years horizon, it will be necessary to ponder the need to project force within a multinational framework, as a contribution to global peace and security and as an exercise in corresponsibility and solidarity towards our Allies. The reason is that, on an occasional yet regular basis, events may take place demanding our intervention, for example contributing to the fight against piracy off the Somali coast or evacuating civilians in the Gulf of Guinea. This is why we must think of how to respond to this kind of contingencies. We wish to make it clear that we can only ponder intervening in these scenarios once we have completed the stages described above and, of course, having in place a procurement and personnel policy in accordance with our real needs. On the other hand, some of the units that we will have set up may be useful at this stage. We shall next describe this in detail:

Setting up an Expeditionary Command. It will need:

- Joint Expeditionary Headquarters.
- One MRV¹⁶
- One corvette (seconded from the Escort Division) and/or one OPV (seconded from the Littoral Patrol Command)
- Logistic support.¹⁷

15 An example, albeit with excessive dimensions given our needs, are the new US Littoral Combat Ships. The goal behind them is to unify the roles of mine-hunting ships (MCM), missile frigates (FFG), and US Coast Guard offshore cutters.

16 Multi-Role Vessel.

17 Be it seconding one of the Auxiliary Fleet units, or chartering a civilian ship on a temporary basis.

The Joint Expeditionary Headquarters (JEHQ) will be a company-sized unit responsible for C4 (Command & Control, Computers & Communications) tasks. It must comprise staff from the three branches of the military (Naval Force, Land Force, Air Force), making it compulsory to engage in prior joint training for years.¹⁸ This will be a unit ready to be deployed at 24 hours notice. During the first stages of an operation, it will carry out its tasks from the command ship (see MRV), while able to relocate to onshore facilities provide by the Land Force (let us remember that it is a joint unit).

Although the concept of a Multi-Role Vessel (MRV) may seem a bit abstract to non-specialists, it is gaining increased traction thanks to the proliferation of non-conventional conflicts. We have taken as a reference the Royal Danish Navy's Absalon class frigates,¹⁹ since we believe them to best fit with our needs given that Catalonia's main harbours can host them.²⁰ We must again insist, though, that this is no final proposal, since our acquisitions policy will always need to be well planned and realistic.

The protection of the expeditionary group will be a job for already existing assets, in addition to the MRV. As a function of the degree of intensity of the conflict, either corvettes or OPV would be given the job.²¹ We should never forget that such operations will be carried out together with our Allies, sharing logistics with them. Concerning personnel, the necessary complement (let us bear in mind that the JEHQ is a joint unit) would not exceed 300. This would take the total strength of our Naval Force to 2,000 men and women, bearing in mind that the figure may go up or down thanks to the reserve system. We have not taken into account, however, the civilian personnel in logistical support functions since their volume may vary as a function of operations and the number of civilian ships chartered.

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18 We have not mentioned it earlier, but it goes without saying that all officers and NCOs will speak English at NATO Level 4.

19 137-meter-long and displacing 6,300 tons, they have a 19.5 meter beam and 6.3 meter draught. They have the necessary internal space to permanently host 70, in addition to the 100-strong crew. Furthermore, with the placement of modules it would be possible to host an additional 130 on a temporary basis (ideal to hold the JEHQ). On top of that, their internal decks have 915 square meters available for material. With a retractable rampart aft, one of these frigates may also act as a RO-RO (roll-on roll-off) vessel. We should not forget her capabilities in terms of conventional operations either: 8 Harpoon missiles, 36 ESSM for anti-aircraft defence, MU90 torpedoes, one 127 mm gun and two 35 mm pieces. This class also has a flight deck and a hangar for helicopters, as well as SRC-90E craft to insert special forces.

20 In addition to Barcelona and Tarragona, the ports of Palamós, Vilanova i la Geltrú, and Sant Carles de la Ràpita, may be home to one of these ships in case of need.

21 Having more than three (minimum number to ensure one can be in patrol at all times) Offshore Patrol Vessels is also a decision based on this idea: leaving one available for expeditionary operations.