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VOLUNTEER RESERVES: ESTABLISHING CLOSER LINKS TO CIVIL SOCIETY [1]

RESERVA DE VOLUNTARIADO: UMA APROXIMAÇÃO À SOCIEDADE CIVIL

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Abstract

This article proposes features for a new concept of reserves, a volunteer reserve system to complement the regular reserves, which the Portuguese Armed Forces can use to increase their staff and their linkages with general society, as well as to build national resilience. The analysis model used in the study was applied to the Portuguese system and to the volunteer reserve systems of other countries: France, Holland (officially the Netherlands since January 2020), Italy and the United Kingdom. Having analysed the systems, the features that were deemed applicable to the Portuguese AAFF were selected and assessed by nine experts.

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[1] Article adapted from the individual research work carried out in the 2018 / 2019 General / Flag Officers Course. The defence took place in July 2019 at the Military University Institute.

The study findings consist of a set of features that can be included in a Portuguese Volunteer Reserve system based on the Availability Reserve. The possibility of developing a Volunteer Availability Reserve system will depend on the interest of the National Defence Ministry, of former military personnel and of employer organizations.

Keywords: Armed Forces, Reserves, Availability Reserve, Volunteer Reserve.

Resumo

Neste artigo são apresentados contributos para um novo conceito de reserva, com as características necessárias para desenvolver um modelo de emprego da reserva de disponibilidade voluntária, em complemento ao modelo existente, passível de poder ser adotado nas Forças Armadas portuguesas, reforçando os seus efetivos, os laços com a sociedade e a capacidade nacional de resiliência civil. No processo de investigação, foi usado um modelo de análise que se aplicou à realidade nacional e a modelos de emprego de reserva voluntária implementados noutros países designadamente: França, Holanda (desde janeiro de 2020, designada de Países Baixos), Itália e Reino Unido. A partir desta análise foram inferidas as características aplicáveis à realidade nacional, as quais foram avaliadas por nove especialistas. Como resultado, apresenta-se um conjunto de caraterísticas passíveis de serem vertidas num modelo de Reserva Voluntária para Portugal, tendo por base a Reserva de Disponibilidade. Concluiu-se, ainda, que o desenvolvimento de um modelo de emprego da Reserva de Disponibilidade Voluntária necessita do envolvimento da Defesa Nacional, da disponibilidade dos ex-militares e da disponibilidade ou interesse das entidades empregadoras.

Palavras-chave: *Forças Armadas, Reserva, Reserva de Disponibilidade, Reserva Voluntária.*

1. Introduction

> *Today's security environment is unpredictable. Threats can come from state and non-state actors, including terrorism and other asymmetrical threats, cyber-attacks and hybrid warfare, which blur the lines between conventional and unconventional forms of conflict. They can also come from natural disasters such as floods, fires and earthquakes. The challenge of adapting and responding to these hazards is compounded by trends that have radically transformed the security environment.*
>
> *North Atlantic Treaty Organization* ([NATO], 2018a)

Society's vulnerability to new forms of conflict and natural disasters has been a growing concern for NATO, as the delivery of forces and military capabilities depends, among other factors, on the availability of civilian resources (NATO, 2016a). This vulnerability is seen as a challenge of such proportions that the Warsaw Summit communiqué, issued after the meeting took place in 8-9 July 2016, stressed the Alliance's:

> [...] commitment to continue to enhance our resilience and to maintain and further develop our individual and collective capacity to resist any form of armed attack. [...] In this context, we welcome the Resilience Guidelines approved by Defence Ministers in June 2016. (NATO, 2016b, para.73)

However, in 2001 NATO had already expressed concern regarding the need to use civilian resources to bolster its forces, as the Alliance nations considerably reduced their standing armies and, in some cases, mandatory recruitment was abolished or suspended. In the face of this trend, the Reserve Forces have become increasingly important, and NATO has committed efforts to understanding how to best explore their potential (NATO, 2001).

The Portuguese Reserve Forces consist of the Career Personnel (CP) (Decree-Law No. 90/2015, p.3222) in the Availability Reserve (AR)[2] and the Recruiting Reserve (RR)[3] (Law No. 174/1999, p. 6541). At this time, there is no system for mobilising a Volunteer Reserve that includes both men and women, former service members and / or civilians, both in peacetime and during emergencies in national territory.

Loureiro dos Santos (2014) states that "the smaller the standing armies of a Defence system, as is our case, the more crucial are the mechanisms that allow those armies to be expanded to larger forces when needed".

This study addresses two core areas of Military Science, Study of Crisis and Armed Conflicts and Human Behaviour and Healthcare in Military Contexts (Art. 5 of Decree-Law No. 249/2015; Military University Institute [IUM], 2018), and aims to propose a set of features that can be included in a Volunteer Reserve system that can be used to increase the Portuguese Armed Forces (AAFF) personnel, its linkages to general society and the national resilience.

This study's General Objective (GO) is to propose a model of Volunteer Reserves for the Portuguese Armed Forces. To achieve it, three specific objectives (SO) were set:

SO1: To analyse the Portuguese Availability Reserve system;

SO2: To analyse the Volunteer Reserve systems of some NATO countries;

SO3: To assess the main features of a future Volunteer Reserve system for the Portuguese AAFF.

2. Theoretical framework and analysis model

The establishment of the National Reserve Forces Committee (NRFC) in 1981 marked the beginning NATO's efforts to promote and strengthen the role of reserve forces and reservists[4] as a vital component of the Alliance's AAFF and the AAFF of its partners (Allied Command Transformation [ACT], 2018).

This Committee became even more relevant with the changes in the European conscription and recruitment systems. Many nations have abolished or suspended compulsory recruitment and transitioned to a professional / semi-professional model. This has led to a shortage in staff and a greater need for reservists (NATO, 2001, para. 5).

The first guideline document, the NATO *Framework Policy on Reserves*, was issued in

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[2] The RR, cf. Article 4 of Law 174/1999 (p.6541), "[...] consists of Portuguese citizens from 18 to 35 years of age, who have never served and who can be recruited in exceptional circumstances, under terms to be set out."

[3] The AR, cf. Article 5 of Law No. 174/1999 (p.6541), "[...] consists of Portuguese citizens who have completed their military service before the age limit for active duty. The purpose of the availability reserves is to keep the Armed Forces appropriately staffed."

[4] "Any serviceman or servicewoman not normally on full-time service that may be called for temporary military activities. They may be volunteers, ex-regulars or conscripts. Based on national legislation and Reserve system, the Reservist may have an obligation to serve, or serve on a voluntary basis" (NATO, 2012b, para. 8).

2001 and revised in 2012. The document describes the procedures for developing, generating and deploying reservists, which is further proof of the importance of these forces (NATO, 2012b, para. 5).

Modern reserve systems are made up of especially trained personnel, who support and supplement the regular forces and strengthen the linkages between the AAFF and general society (NATO, 2012b, para. 6).

NATO has also expressed concern regarding the availability of reservists, and the framework documentation recommends safeguarding not only their duties and obligations, but also their rights, social and military benefits, family support and job security (NATO, 2012a, para. 20).

The relationship with Employer Organizations (EO) is another concern for NATO. The Alliance has recommended that countries develop specific programmes and invest in cooperation with private organizations, and is prepared to represent the allied countries as an international organization (NATO, 2012b, para. 22).

In 2018, the NRFC held its annual meeting at NATO Headquarters, where Chairman of the Military Committee General Petr Pavel stated that "as we make more and more demands of our forces while not always increasing their numbers, the role of our Reserve Forces to reinforce, enhance and improve our regular forces is increasingly critical" (NATO, 2018a).

The **analysis model** used in this study is based on the organizational strategy model proposed by Hayes (1985), in combination with the model proposed by Lykke (2001, p.179), who advances that the concept of *ends, ways and means* can be applied to any type of strategy, and on Yarger's model to develop military strategies (2006, p.6). This investigation uses the "Purposes-Processes-Resources" dimensions of the model known as "ends-ways-means" (Yarger, 2006, p.69), where:

– Ends / Purposes describe the desired end result;

– Ways / Processes explain "how" those results will be achieved;

– Means / Resources define the tangible and intangible resources required to execute the processes.

Having accounted for the dimensions that combine organizational strategic management and human resource management (Lengnick-Hall, Lengnick-Hall, Andrade, & Drake, 2009, p.65), a set of variables and indicators was developed for the analysis model, bearing in mind that there are different Reserve systems, which differ in terms of structure, quantity, type, budget, training, availability and length of service (NATO, 2001, para. 6).

The following assessment criteria were drawn from Yarger (2006, p.70):

– Suitability determines if the desired strategic effects accomplish their purpose using the available instruments;

– Feasibility defines if the strategic concept can be executed with the available resources;

– Acceptability assesses if the intended strategic effects justify the ends, processes, and tangible and intangible resources used to achieve those effects.

This investigation followed the structure presented in Figure 1, which can be used by other studies with the necessary adjustments.

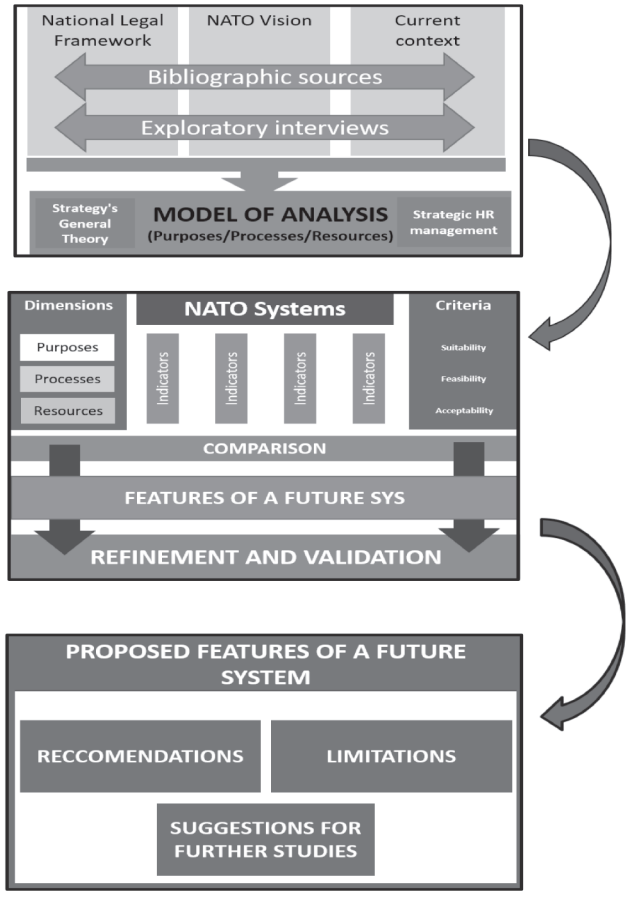

Figure 1 – Research framework

3. Methodology and method

In terms of methodology, the study used inductive reasoning, a qualitative research strategy and a case study research design.

As for the research **method**, the:

– Participants consisted of nine military and civilian experts with recognised experience in matters of Security and Defence and HR management: the former Chief of General Staff of the Armed Forces, General Valença Pinto; the former Chief of Staff of the Air Force, General José Pinheiro; the former Chief of Staff of the Navy, Admiral Macieira Fragoso; the Personnel Superintendent of the Navy, Vice Admiral Neves Coelho; the Personnel Commander of the Army, Lieutenant General Fonseca e Sousa; the Personnel Commander of the Air Force, Lieutenant General Rafael Martins; the Director-General of National Defence Resources, Alberto Coelho; Helena Carreiras, Associate Professor at ISCTE-Lisbon University Institute; and José Luís Nascimento, Assistant Professor at the Institute of Social and Political Sciences of the University of Lisbon (ISCSP-UL).

– Procedures included assuring the interviewees of the anonymity and confidentiality of their answers at the start of each of the face-to-face interview (all interviewees waived this option).

– Data collection tools were a literature review, a content analysis on the answers to the Requests for Information made to four NATO countries (France, Holland[5], Italy and the United Kingdom), and a semi-structured interview script.

4. The Portuguese Availability Reserve system

Pursuant to Article 276 of Constitutional Law No. 1/2005 of 12 August, which presents the Constitution of the Portuguese Republic (2005), "The defence of the Nation is a fundamental right and a fundamental duty of all Portuguese [and] Military service shall be compulsory for the period and on the conditions that the law shall prescribe".

Organic Law No. 5/2014 of 29 August on the Law on National Defence (LDN) (2014) 2014, pp.4548, 4550, 4552, 4553), states that

> it is the right and duty of each Portuguese citizen to resist, actively and passively, in any area of the national territory occupied by foreign forces [art. 2, paragraph 5]; [it is the duty of the Assembly of the Republic] to legislate on the system of mobilisation [art. 11, sub-paragraph m)]; [it is the duty of the Government] to legislate on matters pursuant to the development of the general basis of the mobilisation system [as well as] [...] to order the mobilisation of citizens to defend the national territory, under the terms set out in the law [art. 12, sub-paragraphs d) and i)]; [it is the responsibility of the Minister of National Defence (MDN)] to submit proposals for a system of mobilisation that serves the objectives of the national defence policy to the Supreme Council of National Defence (CSDN), as well as to the Council of Ministers [art. 14, paragraph 3, sub-paragraph u)]; [it is up to the other ministers, in coordination with the MDN,] to prepare their services for mobilisation [art. 15, paragraph 2, sub-paragraph b)]; [and up to the CSDN to issue an opinion] on the proposals for a mobilisation system [...] that serves the ongoing objectives of the national defence policy [art. 17, paragraph 1, sub-paragraph j)].

Article 36 of the LDN (2014, p. 4555) also states that

> in peacetime, military service is voluntary, [and that] citizens eligible by law to be conscripted into military service may, under exception circumstances, be called up to serve in the AAFF in peacetime under the terms of the law on military service.

The Strategic Concept for National Defence (2013, pp. 1982, 1988) defines the ongoing national goal of

> building national resilience to empower the national community to prevent or resist any foreign aggression, [and the related short-term goal of] rationalising and maximising the use of available resources by developing integrated civil and military capabilities.

Portugal has a reserve of current and former military personnel and civilians (Figure 2) who can be called up / mobilised when needed.

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[5] Officially the Netherlands since January 2020.

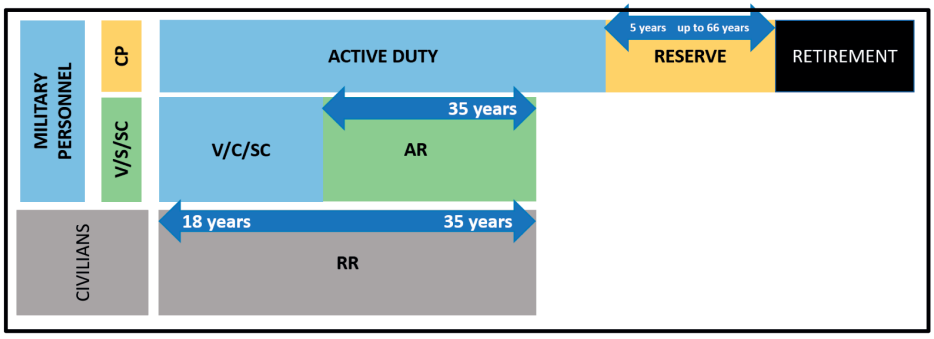

Figure 2 – Portuguese reserve system

The LDN and Article 1 of the LSM (Law No. 174/1999 of 21 September, p.6541) state that "in peacetime, military service is voluntary, [however] Portuguese citizens [...] may be called up or mobilised for active duty". Therefore, in the current time of peace, the pool of reservists available for call up or mobilisation could transition to a partially volunteer force.

This would initiate a Special Recruitment process, as set out in Article 36 of Decree-Law No. 289/2000 (p.6432) "[...] to call up or mobilise for effective military service [...]" the former military personnel in the AR and the civilians in the RR.

Pursuant to Article 55 of Decree-Law No. 289/2000 (p.6435), the AR consists of former Volunteer (V), Contract (C) and Special Contract (SC) personnel, citizens called up / mobilised through special recruitment, and CP who have been discharged but meet the call-up / mobilisation criteria.

The AR can be called up in the circumstances described in Figure 3, as set down by Law No. 174/1999 (p.6545).

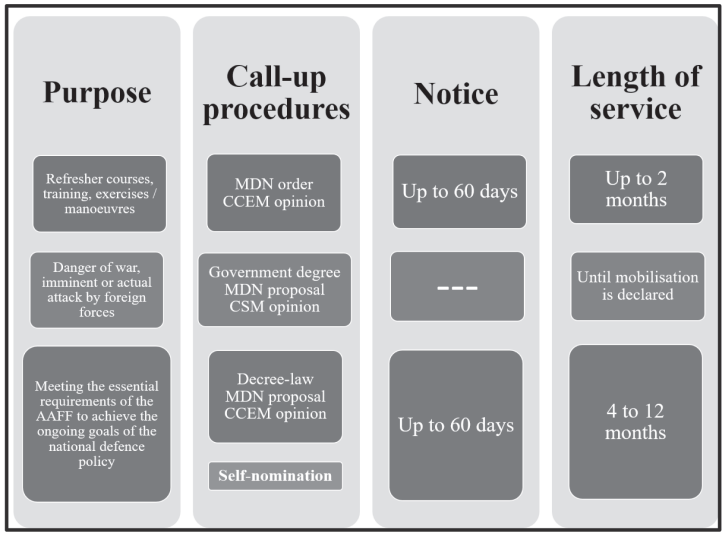

Figure 3 – Circumstances in which the AR can be called up

Decree-Law No. 289/2000 (p.6435) states that former military personnel can be called up for active duty for a period of six years (Art. 56) after completing their term of service and for no longer than the current age limit (35 years of age) (Art. 55) (Figure 4).

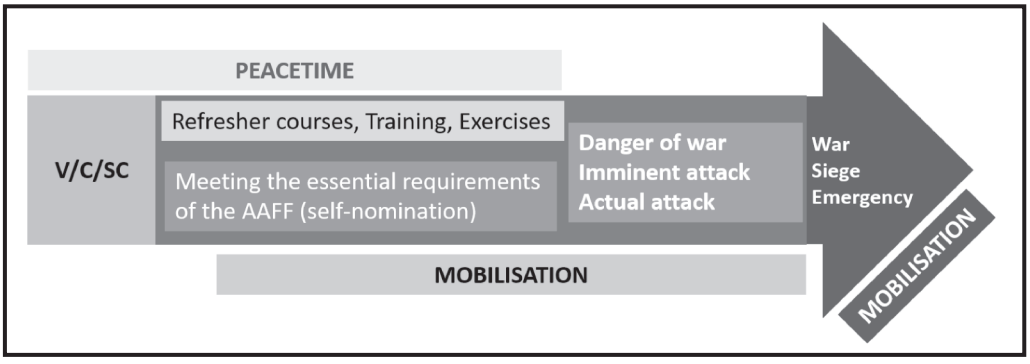

Figure 4 - Availability Reserve

Despite the existence of this legal framework, other than an initiative by the Air Force in 2014 to call up Assistance and Aid System Operators (OPSAS) to address a shortage of these specialists (Directorate-General for National Defence Resources [DGRDN], 2018; Air Force, 2018b), the branches have not called up / mobilised the AR since Portugal abolished the Mandatory Military Service (SMO), making it impossible to test and identify gaps in the systems / processes (Army, 2018a; Air Force, 2018a; Navy, 2018).

As for the "pool" of personnel in the AR:

– The Army (2018b) is the only branch that assigns duties to the AR, with a staff of 2.095 reservists (33 officers, 172 sergeants and 1.890 other ranks);

– Figure 5 shows the AR staff assigned to the branches as of 1 November 2018.

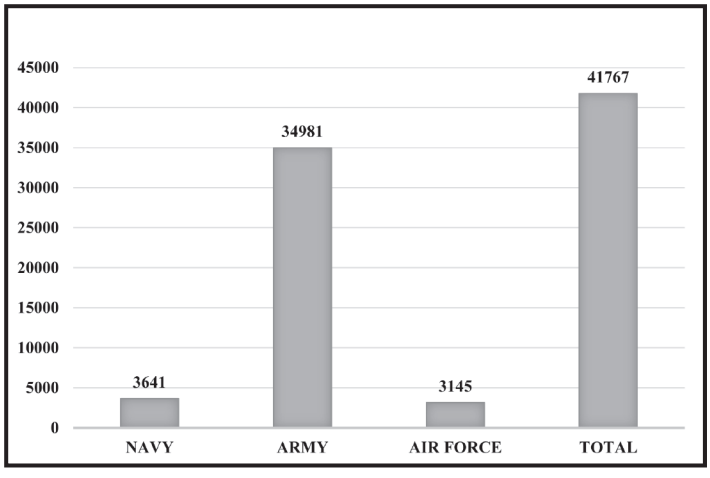

Figure 5 – AR staff per branch (01NOV2018)
Source: Army (2018a), Air Force (2018a) and Navy (2018).

– A volunteer system would allow the AAFF to call up some of the former service members in the AR (a total of about 42.000 at the time of the survey) to supplement its staff and build the national resilience capacity, as Figure 6 illustrates.

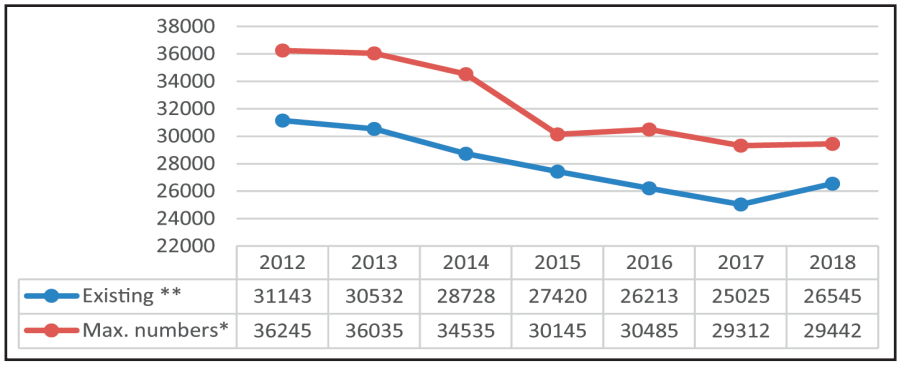

Figure 6 – Existing and authorised personnel in the AAFF (CP + V/C personnel)
Source: DGRDN (2019).

Table 1 presents the findings of the analysis of the national system based on the abstract model and assessment criteria defined above.

Table 1 – Analysis model applied to the national system

	Indicators	Availability Reserve	
Purpose	Fix and operational components	Refresher courses, training / exercises.	Meeting the essential requirements of the AAFF to achieve the ongoing goals of the national defence policy.
	Reservist units Integrated in U/E/C		
	Strategic Communication	-	
	Self-nomination	-	Self-nomination.
Processes	Commitment to the AAFF	Liability for call up.	
	Days / year (contract)	-	4-12 months.
	Age limit	35 years of age.	
	Commitment to the EO	-	
	Incentive schemes and family support	Similar to VP.	
	"Career" progression	-	
	Days / year (training)	Up to 2 months.	-
	Courses / exercises / year	-	
Resources	Volunteers / year	41.767 (AR staff).	
	Active duty personnel in support roles	AAFF staff	
	Annual budget	-	
	Financial rewards	Similar to VP.	
	Facilities	-	
	Equipment		

As can be inferred from the above, in terms of:

– Suitability, the existing model suits the purpose it was designed to accomplish (call up), however, the processes and resources involved should be examined and explored to ensure that the structural and genetic goals are met. The guidelines for the 2019 State Budget in regards to expenses with personnel do not mention this requirement (Budget General Directorate, 2018, pp.11-12).

– Applicability, the system has not been tested by the branches since the SMO was abolished. However, this can be done as part of the Army's training and education programme (Army, pp.7-1). Furthermore, Decree-Law 40/2019 (which sets out the staff numbers) does not define a specific pool from which to select the staff who will administer refresher courses, training and exercises. Therefore, the conditions must be created to implement this feature in the future.

– Acceptability, the compulsory nature of the national reserve system has conditioned its applicability (as demonstrated by the Air Force's attempt to call up OPSAS) and its potential to increase the national resilience capacity.

Furthermore, while the national system includes a process of self-nomination, in which military personnel offer to help accomplish the ongoing goals of the National Defence policy, this modality has never been used.

5. Volunteer Reserve systems of some NATO countries

The data presented in this section was obtained by analysing the literature and the answers to the Requests for Information (RFI) that were sent to the four NATO countries listed below.

5.1. France (FR)

There are three types of reserves (French Defence Attaché, 2018):

– The *Réserve Opérationnelle d'Engagement*, known as RO1, which consists of volunteers who participate in the AAFF operational activities and courses / training;

– The *Réserve Opérationnelle de Disponibilité* (RO2), which is made up of service members who were discharged from the military but are liable for call up during a five year period;

– The *Réserve Citoyenne de Défense et de Sécurité*, which consists of volunteers who do not have military status.

Given the scope of this investigation, only RO1 was analysed, as summarised in Table 2.

Table 2 – French system

Variables	Indicators	Analysis of the French system
Increase staff during peacetime	Fix / operational component	– Fix / operational component / National Deployed Force (NDF).
	Reservist units Integrated in Units / Establishments / Departments (U/E/C)	– Integrated in units / reservist units; – Have Staff roles.
Strengthening the link between the AAFF and civil society	Strategic Communication	– Dissemination through the National Defence / Branch websites; – Protocols with companies; – Award for companies.
Psychological contract	Commitment to the AAFF	– Renewable up to five years; – Liability for call up; – High liability for call up.
	Days / year	– 10 - 210 days.
	Age limit	– Officers: 56-66 years of age; – Sergeants: 52-62 years of age; – + 5 years of compulsory reserve service; – Soldiers: maximum 50 years of age.
	Commitment to the EO	– Promoting reserve service to employers
	Incentive schemes and family support	– Strong incentive scheme.
	"Career" progression	– Up to Colonel.
Training	Days / year	– Average 15 days (100 hours); – Deployment in National Territory (NT) and NDF.
	Courses / exercises / year	– Participation in courses / exercises.
Human resources	Active duty personnel in support roles	– As needed for the training required.
Financial	Financial rewards	– Remuneration / supplements similar to those of CP.
Material	Facilities	– Available resources are optimised.
	Equipment	

Source: French Defence Attaché (2018), Gerard (2019), Gouvernement Francaise. (n.d.), Loi n.º 1999-894 (1999), Loi n.º 2018-607 (2018), Ministère de L'Intériour e Ministère des Armées (2017), Ministère des Armées. (2017a), Ministère des Armées. (2017b), Ministère des Armées. (2018a), Ministère des Armées. (2018b), Ministère des Armées. (2018c), Ministère des Armées. (n.d.), Réservistes des Armées (n.d.).

In terms of Purpose (Gerard, 2019; Ministère des Armées, 2017b):

– The Volunteer Reserves (VR) are called up during peacetime to perform the same tasks and activities as the regular forces. They can perform Staff roles, both integrated in regular units and in reservist units;

– Reservists are frequently deployed in missions outside the French territory.

As for Processes, there is an effort to establish protocols that link the AAFF, reservists and EO to obtain operational benefits, and there are several incentive packages, which reinforce these linkages (Gerard, 2019).

Referring to Resources, Gerard (2019) reports that: about 18.000 former service members joined the reserves since 2015; French reservists benefit from a remuneration scheme similar to that of CP; the facilities and equipment are shared by regular forces and reservists to optimise the use of resources.

5.2. Netherlands (NL)

There are three types of reservists:

– The reservists in the Army National Reserve Corps, who perform military tasks, and the Air Force Reservists Group (Ministry of Defence, 2014, p.13).

– The specialist reservists who serve in the Civil Military Interaction Command and in the Navy's Naval Cooperation And Guidance for Shipping Organisation (Ministry of Defence, 2014, p.13).

– Operational reservists are former military personnel who remain attached to their units and are available for call-up when requested (Majoor Saat, 2019).

An overview of the Dutch system is presented in Table 3.

Table 3 – Dutch system

Variables	Indicators	Analysis of the Dutch system
Increasing staff during peacetime	Fix / operational component	– Fix / operational component / NDF.
	Reservist units Integrated in U/E/C	– Integrated in units / reservist units; – Have Staff roles.
Strengthening the link between the AAFF and civil society	Strategic Communication	– Dissemination through the National Defence / Branch websites; – Created the Bureau Reservists and Society; – Award for companies.
Psychological contract	Commitment to the AAFF	– Annual commitment plan; – Liability for call up without notice.
	Days / year	– Minimum 120 hours (5 days). (Note: This system only defines the minimum availability. The maximum period is not defined as it consists of the age limit.
	Age limit	– 52-55 years of age.
	Commitment to the EO	– The employer organization receives an allowance of €55 per day (five days a week) as compensation for periods of absence longer than three months.
	Incentive schemes and family support	– Established the Service Centre Employer Support Reservists; – Eligible for military pension.
	"Career" progression	– Eligible for promotion.
Training	Days / year	– Former military personnel do not receive specific training.
	Courses / exercises / year	– Participation in courses / exercises.
Human resources	Active duty personnel in support roles	– As needed for the training required.
Financial	Financial rewards	– Remuneration / supplements similar to those of CP.
Material resources	Facilities	– The National Reserve Corps has its own facilities and equipment.
	Equipment	

Source: Algemene Vereniging van Reservemilitairen (2018), Bureau Reservisten en Samenleving (2014), Koninklijke Landmacht. (n.d.), Koninklijke Luchtmacht (2019), Koninklijke Marine. (n.d.), Majoor Saat (2019), Ministerie van Defensie (2017a), Ministerie van Defensie. (2017b), Ministerie van Defensie. (2019a), Ministerie van Defensie. (2019b), Ministerie van Defensie. (n.d.), Ministerie van Defensie., Grotere rol voor reservisten (s.d.), Ministerie van Defensie., Kerngegevens Defensie - feiten en cijfers (2018), Ministry of Defence (2014), Rijksoverheid. (n.d.).

In terms of Purpose, the Dutch reservists are called up in peacetime, both to perform operational activities and to support the fix component. In the Dutch system, reservists can also be integrated in NDF (Ministry of Defence, 2014). The Bureau Reservists and Society was created to establish linkages between the AAFF, EO and reservists, in order to reinforce the links to civil society and encourage companies to become more involved in matters of National Defence (Algemene Vereniging van Reservemilitairen, 2018).

In terms of Processes (Ministerie van Defensie, Reservisten, n.d.):

– There are procedures in place to call up reservists who work in state organizations, and the National Defence authorities are preparing to extend this system to private companies;

– Reservists and their EO agree on the number of days the reservist will be available for reserve duty (on a case-by-case basis).

As for Resources, the Navy relies frequently on military reservists, who are paid a salary similar to that of CP. In addition to the resources allocated to the National Reserve Corps, reservists share resources with the regular forces (Koninklijke Landmacht, n.d.; Koninklijke Luchtmacht, 2019; Koninklijke Marine, n.d.).

5.3. Italy (IT)

The *Forze di Completamento Volontarie* are made up of officers, sergeants and other ranks who can be called up in peacetime, on a voluntary basis, to perform roles or fill positions in the units or commands of the AAFF (Stato Maggiore della Difesa, 2019).

The *Riserva Selezionata*, which comprises only officers with highly specialised skillsets, whose contributions both on national territory and in NDF have proved invaluable to the Italian AAFF (Stato Maggiore della Difesa, 2019).

Italy's reserve system is summarised in Table 4.

Table 4 – Italian system

Variables	Indicators	Analysis of the Italian system
Increasing staff during peacetime	Fix / operational component	– Fix / operational component / NDF.
	Reservist units Integrated in U/E/C	– There are no reservist units.
Strengthening the link between the AAFF and civil society	Strategic Communication	– MND Communication Plan; – Dissemination through the National Defence / Branch websites.
Psychological contract	Commitment to the AAFF	– Participating in training; – Liability for call up.
	Days / year	– 15 days to 6 months.
	Age limit	– 60 years of age.
	Commitment to the EO	– Reservists are guaranteed job protection; – Employers are compensated for the reservist's salary.
	Incentive schemes and family support	– Time served in the reserves counts toward retirement; – Preference when applying for civil servant jobs.
	"Career" progression	– Eligible for promotion from Ensign to Lieutenant Colonel depending on academic background, experience and age.

Training	Days / year	– Former military personnel who have not been on active duty for over five years attend a refresher course.
	Courses / exercises / year	– Participation in courses / exercises.
Human resources	Active duty personnel in support roles	– As needed for the training required.
Financial resources	Financial rewards	– Remuneration / supplements similar to those of CP.
Material resources	Facilities	– Available resources are optimised.
	Equipment	

Source: Aeronautica Militare – Le Forze di Completamento (s.d.), Buscemi (n.d.), Decreto de 15 November (2004), Decreto Legislativo n.º 66 (2010), Esercito - Riserva Selezionata (2014), Esercito. (2013), Gabinetto del Ministro (2018), Imperia (2011), Kern (2019), Legge n.º 653 (1940), Marina Militare. (n.d.), Ministero della Difesa (2011), Italian Parliament. (n.d.), Senato (2018), Stato Maggiore della Difesa (2019).

This system has some unique features. In terms of Purpose, its greatest advantage is that it provides the Italian AAFF with highly specialised reservists who provide a positive contribution to their NDF. This is the only system analysed in this study that does not use reservist units. Instead, reservists are integrated in regular units or perform Staff roles (Stato Maggiore della Difesa, 2019).

With regards to Processes, this is the only system that allows reservists to join as officers, provided they meet certain selection criteria, such as age, academic training or professional experience (Marina Militare, n.d.). Former military personnel who have not been on active duty for over five years attend a refresher course (Marina Militare, n.d.).

As for Resources, reservists receive a salary similar to those of CP (Legislative Decree No. 66, 2010) and both facilities and equipment are shared between the regular forces and reservists (Stato Maggiore della Difesa, 2019).

5.4. United Kingdom (UK)

There are two types of reservists (Ministry of Defence, 2013, pp.9, 16):

– The Volunteer Reserves, which comprise the Navy's Royal Naval Reserve and Royal Marines Reserve, the Army Reserve, and the Air Force's Royal Auxiliary Air Force;

– The Regular Reserves are made up of former military personnel in the Regular Forces, who can be called up when needed.

The Volunteer Reserves system is summarised in Table 5.

Table 5 – British system

Variables	Indicators	Analysis of the British system
Increasing staff during peacetime	Fix / operational component	– Fix / operational component / NDF.
	Reservist units Integrated in U/E/C	– Integrated in units / reservist units; Have Staff roles.
Strengthening the link between the AAFF and civil society	Strategic Communication	– Highly organized and "aggressive".

Psychological contract	Commitment to the AAFF	– Liable for mobilisation for one year (in every five years);[6] – High liability for call up.
	Days / year	–19-27 days.[7]
	Age limit	– 52-59 years of age.
	Commitment to the EO	– The training provided by the AAFF is accredited. – Reservists are given a three-month notice before their annual training; an 18-month notice before a deployment; a nine-month notice in the Army and a three-month notice in the Navy and Air Force for deployments in the national territory, and a notice of 28 days in contingency situations.
	Incentive schemes and family support	– Strong incentive scheme; – £10,000 (±€11,000) for joining the Army Reserve with four years of military experience, within six years of discharge, and up to 35 years of age.
	"Career" progression	– Eligible for career progression.
Training	Days / year	Former military personnel attend two weeks of training.
	Courses / exercises / year	Participation in courses / exercises.
Human resources	Active duty personnel in support roles	– As needed for the training required.
Financial resources	Financial rewards	– Remuneration / supplements similar to those of CP.
Material resources	Facilities	– Available resources are optimised.
	Equipment	– Substantial investment.

Source: Army. (n.d.), Edmunds, Dawes, Higate, Jenkings, & Woodward (2016), Government of the United Kingdom (2011), Phillips (2012), Ministry of Defence (2013), Ministry of Defence. (2016a), Ministry of Defence. (2016b), Ministry of Defence. (2018a), Ministry of Defence. (2018b), Ministry of Defence. (2019), Ministry of Defence. (n.d.), Ministry of Defence. (n.d.), Ministry of Defence. (2011), Morgan (2018), Royal Air Force (2018), Royal Navy. (n.d.a), Royal Navy. (n.d.b), Scott (2018), Secretary of State for Defence (2017).

In terms of Purpose, there has been a noticeable investment in strategic communication (over £270M) in an attempt to revitalise the VR after years of sharp decline (Secretary of State for Defence, 2017, p.20). Of the four systems, the British system invests the most in the linkages between the AAFF and EO.

As for Processes, the Navy's Project Firefly aims to attract former service members (Royal Navy, n.d.b.), and the Army offers a strong incentive package to its military reservists (Army, n.d.).

There has been a substantial investment in Resources. The Army reserves have received similar vehicles, communications equipment and uniforms as the regular forces, and there is an ongoing investment programme valued at about £200M (Ministry of Defence, n.d., p.5).

[6] Two different scenarios may occur. Case 1: All UK reservists may be mobilised and deployed in a 1-year mission (award) for each 5-year commitment period. Case 2: Reservists generally have a minimum commitment to serve 19 to 27 days per year, depending on the regiment to which they are attached.

5.5. Comparative analysis

Table 6 shows the main trends in the four systems based on the data analysis.

Table 6 – Comparative analysis of the systems used by four NATO countries

Variables	Indicators	Analysis of the Italian system
Increasing staff during peacetime	Fix / operational component	– In the fix / operational component / NDF: FR/NL/IT/UK.
	Reservist units Integrated in U/E/C	– Integrated in units / reservist units, and have staff roles: FR/NL/UK.
Strengthening the link between the AAFF and civil society	Strategic Communication	– National dissemination through websites and Communication Plans: FR/NL/IT/UK. – Have protocols with private employer organizations (FR/NL/UK) and educational establishments (FR). – Employer Organization Award: FR/NL/UK.
Psychological contract	Commitment to the AAFF	– Courses, training and exercises: FR/NL/IT/UK. – Liability for call up: FR/NL/IT/UK. – High liability for call up: FR/UK.
	Days / year	– Minimum 120 hours (NL) and maximum 210 days (FR).
	Age limit	– Age limit set for CP or similar (FR/NL/IT/UK) + 5 years (FR).
	Commitment to the EO	– Have signed protocols: FR/NL/IT/UK. – Financial or tax support: FR/NL/IT/UK. – Informing the employer organization that the reservist will be called up: FR/UK.
	Incentive schemes and family support	– Certified training: FR/NL/UK. – Eligibility for military pension or time served counts toward retirement: NL/IT/UK. – Healthcare: FR/NL/UK. – Wide range of incentives: FR/UK.
	"Career" progression	– Yes: FR/NL/IT/UK.
Training	Days / year	– Do not require training: NL. Two weeks of training: UK. Personnel who have not been on active duty for over 5 years attend a refresher course: IT.
	Courses / exercises / year	– Specialisation (FR/NL/IT) and promotion (UK). – Annual exercise: FR/NL/IT/UK.
Human resources	Active duty personnel in support roles	– As needed for the training required: FR/NL/IT/UK.
Financial resources	Financial rewards	– Similar to those of CP: FR/NL/IT/UK.
Material resources	Facilities	– Available resources are optimised: FR/NL/IT.
	Equipment	

Table 6 also shows that all four countries use their VR in peacetime to support the regular forces, both on national territory or integrated in their NDF.

Reservists are generally integrated with the regular forces and are used to supplement the organic units, to form reservist units when the mission requires it, and to perform Staff roles, given some reservists' highly specialised skillset. Another general trend is the concern with integration in terms of training, infrastructure and equipment.

As for strategic communication, the United Kingdom, France and the Netherlands have made a significant investment in dissemination and in fostering closer links with

EO, promoting the involvement of a larger number of companies and, when possible, of companies with a large staff, as this will increase the visibility of the benefits for both parties, attracting more reservists and future partners.

With regards to commitment to the AAFF, there is an effort to "tailor" the approach to each specific situation, that is, a reservist's commitment to the military must be negotiated with the EO, and usually includes a leave of absence to participate in courses / training, annual exercises, a period of annual availability and, in some cases, depending on the AAFF's need for the reservist's specialised skillset, a high liability for call up.

Reservists must be available for call up for a maximum of 210 days (France), when the national interest is at stake and / or when there is a need to deploy forces outside national territory.

The age limits for Volunteer Reservists (VR) generally depend on the reservists' physical and psychological fitness. These limits tend to be based on the age limit for regular military personnel, which in some cases can extend up to 66 years of age.

As for the relationship with the EO, there is a noticeable effort to ensure that companies are not placed at a disadvantage by the absence of their employees. There are financial rewards and tax exemption schemes in place, and there is an effort to certify all training given by the AAFF to ensure that both reservists and EO receive a return on their investment. Generally, the AAFF try to ensure that the human resource departments of both public and private companies are given sufficient notice of the annual leaves of absence.

Staff constraints due to the limited budget allocated to the regular forces and the need to increase the personnel available both nationally and outside the national territory have led to the creation of several incentive packages, and there are specific programmes and incentives for former service members (the latter in the case of the UK).

The Italian system is unique in terms of career progression, as both former service members and civilians are eligible for promotion, provided they meet certain eligibility criteria, the most important of which is having a skillset that the AAFF require.

Finally, all countries offer reservists the same salary and supplements as those defined for the Regular Forces, which reinforces the importance of reservists as an integral part of the national forces.

6. Main features of a future Volunteer Reserve system for the Portuguese AAFF

This section contains features that may be included in a general system of availability reserves. The different dimensions were evaluated in terms of suitability, feasibility and acceptability, as defined in the research model.

6.1. Purpose

The trend regarding the variable "increasing staff in peacetime" was that it was deemed suitable, feasible and acceptable, as it enables the use of reservists in the fix, operational and NDF components. In accordance with the principle of flexibility, reservists can integrate existing units, form a reservist unit, or, depending on their technical expertise, perform Staff roles. Due to this versatility, VR can be used to fill gaps in the AAFF capabilities and enhance

or create new capabilities.

The variable "strengthening the link between the AAFF and society" reinforces the importance of strategic communication with EO and higher education establishments (thus meeting the criteria of suitability, feasibility and acceptability), of creating an Award for EO, and of using the MDN and AAFF websites to disseminate information.

6.2. Processes

The psychological contract that defines reservists' commitment to the AAFF is deemed suitable, feasible and acceptable in terms of days of availability for courses, training and exercises, the duty to report for service when needed, and the possibility of having a high liability for call up. A minimum (Dutch system) and maximum (French system) number of hours / days of availability per year should be defined, as this will make it easier to plan activities, draft the annual budget, and prepare reservists to deploy in NDF.

The possibility of "career" progression is another aspect of the psychological contract that was deemed suitable, feasible and acceptable, as the prospect of promotion will attract more personnel from the three categories to the VR.

With regards to the age limit, it was deemed suitable, feasible and acceptable to link it to the limits set for career personnel. As in the French system, there is an additional five-year period (which corresponds to the period of five years off active duty) during which reservists can be called up when the AAFF requires their operational or technical skills to fill gaps in critical areas, both in terms of staff numbers and expertise.

As for the commitment between the EO, the AAFF and reservists, creating protocols is considered a suitable, feasible and acceptable measure that will increase trust in the system by creating synergies and reducing unexpected disruptions. Another important measure is to inform stakeholders about any financial support packages and tax benefits that will be made available. This will improve the linkages with the AAFF, and thus their credibility, by disseminating the concept of employee-reservist.

With regards to incentives and family support, certifying the training given to reservists is a suitable, feasible and acceptable measure, as it will enhance the qualifications of employee-reservists and provide EO a return on their investment. The time served in the reserves should count towards retirement or a military pension, and reservists should have the same access to healthcare as V/C/SC personnel.

Analysing the Training variable shows that participation in exercises and specialisation / promotion courses is a suitable, feasible and acceptable measure, depending on the availability of reservists and the needs of the AAFF. In the Italian system, former military personnel who have not been on active duty for more than five years attend a refresher course.

6.3. Resources

The regular forces help train reservists, and reservists receive similar financial incentives

to those of career personnel (as is already the case for V/C/SC personnel).

In regards to the use of infrastructures and equipment, the principle of optimisation of resources was deemed suitable, feasible and acceptable, as it benefits both the regular forces and reservists, and it was found that implementing such a system in the AAFF would not require a considerable investment (except with regards to staff salaries, which must be defined annually). The United Kingdom has made a significant investment in equipment.

Table 7 presents a summary of the features that may be included in a future availability reserve system to be implemented in Portugal.

Table 7 – Proposed features of a future availability reserve system

	Variables	Indicators	Aspects
Purpose	Increasing staff in peacetime	Fix / operational component	– In the fix, operational and NDF components.
		Reservist units Integrated in U/E/C	– Integrate and form units and have Staff roles.
	Strengthening the link between the AAFF and civil society	Strategic Communication	– National dissemination through websites and Communication Plans. – Establish protocols with private employers and educational establishments. – Employer Organization Award.
Processes	Psychological contract	Commitment to the AAFF	– Courses, training and exercises. – Liability for call up. – High liability for call up.
		Days / year	– Minimum 120 hours, maximum 210 days.
		Age limit	– Age limit set for CP + 5 years.
		Commitment to the EO	– Signing protocols. – Financial or tax support. – Giving employers advance notice that the reservist will be called up.
		Incentive schemes and family support	– Certified training. – Eligibility for military pension or time served counts toward retirement: – Healthcare. – Wide range of incentives.
		"Career" progression	– Yes.
	Training	Days / year	– Refresher course for personnel who have not been on active duty for over 5 years.
		Courses / exercises / year	– Specialisation and promotion courses. – Annual exercise.
Resources	Human resources	Active duty personnel in support roles	– As needed for the training required.
	Financial resources	Financial rewards	– Similar to those of CP.
	Material resources	Facilities	– Available resources are optimised.
		Equipment	

6.4. Analysis of the identified features by the nine interviewed experts

Table 8 shows how the nine interviewees assessed the features identified above.

Table 8 – Applicability of the proposed features

Variables	Indicators	Applicability		
		Yes	No	No answer
Increasing staff in peacetime	Fix / operational component	**85.19%**	14.81%	
	Reservist units Integrated in U/E/C	**92.59%**	7.41%	
Strengthening the link between the AAFF and civil society	Strategic Communication	**96.30%**		1
Psychological contract	Commitment to the AAFF	**96.30%**	3.70%	
	Days / year	**88.89%**	11.11%	
	Age limit	**88.89%**		1
	Commitment to the EO	**100%**		
	Incentive schemes and family support	**94.44%**	5.56%	
	"Career" progression	**88.89%**		1
Training	Days / year	**100%**		
	Courses / exercises / year	**94.44%**		1
Human resources	Active duty personnel in support roles	**100%**		
Financial resources	Financial rewards	**88.89%**	11.11%	
Material resources	Facilities	**100%**		
	Equipment			

Table 8 shows that the majority of the nine interviewed experts agree with the identified features, and that only the indicator linked to the variable "increasing staff in peacetime" obtained a "minimum" score of 85.19%.

The next section presents a more detailed account of the content analysis conducted on the interviews, focusing on content with special relevance for each of the six variables.

6.4.1. Increasing the AAFF staff in peacetime

Referring to the use of reservists in the fix component, M.F. Martins (face-to-face interview, 5 February 2019) considers that "they should be used in areas where being a former service member is an advantage" and L.V. Pinto (face-to-face interview, 8 February 2019) states that they should participate "as *augmentees*".

With regards to the operational component, M.F. Martins (op. cit.) states that it is important to "identify the operational areas, skills and career experience of former military personnel so that they can be assigned compatible roles". L.V. Pinto (op. cit.) adds that "they should have proper operational training and be able to perform their operational activities with the stability required", and M.H. Carreiras (face-to-face interview, 14 February 2019) states that "if they have the required skills and capabilities they will be given training and refresher courses to ensure that they are physically (and

otherwise) fit for duty".

The participation of reservists in NDF, according to M.F. Martins (op. cit.) is "usually advantageous". J.A. Sousa (face-to-face interview, 22 February 2019) agrees that they are needed in "in certain specific roles, specialties, and highly critical areas of knowledge (Legal advisor, healthcare, etc.)", and L.M. Fragoso (face-to-face interview, 27 February 2019) confirms that they are invaluable "in providing support, without a doubt, and in the activities for which they were trained".

In regards to having a reservists unit / force, L.V. Pinto (op. cit.) states that it would make sense "to create certain types of reservist pools (e.g. doctors / engineers)", whereas for L.M. Fragoso (op. cit.), "they would always be integrated in other Navy units and would perform technical support roles".

As for performing Staff roles, L.V. Pinto (op. cit.) states that "they may perform technical roles in a Technical Staff, provided they have the required expertise" and L.M. Fragoso (op. cit.) states that "we are thinking about officers, but opening this possibility to other ranks could also be explored".

6.4.2. Strengthening the link between the AAFF and civil society

In regards to disseminating information through the AAFF websites and Communication Plans, "if a reserves system is implemented, it would have to be negotiated with all stakeholders, particularly with employers, who would have to agree to "release" their employees temporarily" (A.A Coelho, face-to-face interview, 07 February 2019).

As for establishing protocols with private EO and higher education establishments, "the system used by the firefighters should be analysed. Of course, it can also be integrated in an idea that is being studied and implemented here in the Navy. The idea is to include a *roulement* of former military personnel in the protocols with private companies, so they can serve with some regularity" (L.M. Fragoso, op. cit.).

The creation of an EO Award would add "prestige and public visibility" (M.F. Martins, op. cit.) and increase "the self-esteem of companies, who would benefit from being recognised as outstanding employers in the field of defence" (J.A. Pinheiro, face-to-face interview, 15 February 2019).

6.4.3. Psychological contract

With regards to courses, training, and exercises, "a reserve system would have to include a refresher course, as well as training and exercises so reservists can keep their skills up-to-date and maintain a minimum level of fitness for duty" (A.A Coelho, op. cit.).

Regarding the duty of availability for call up, L.M. Fragoso (op. cit.) states that there should be "a distinction between emergency situations and planned situations", and L.V. Pinto (op. cit.) adds that this commitment must be "defined by a set of regulations and negotiated with the EO".

V.N. Coelho (face-to-face interview, 11 February 2019) agrees with the possibility of having a high liability for call up status, "provided that the reservist has the appropriate training and qualifications", and J.A. Sousa (op. cit.) states that this status should only be used "for critical needs".

Regarding the annual availability from 120 hours to 210 days, J.A. Sousa (op. cit.) states that it should be used as a context. J.A. Pinheiro (op. cit.) agrees that "some limits should be set; there should be a minimum period", and M.H. Carreiras (op. cit.) adds that it would be better to have "a set minimum and maximum period".

For L.V. Pinto (op. cit.), the age limit should depend "on the roles they perform and on the physical and psychological fitness required for the role". L.M. Fragoso (op. cit.) agrees that reservists may be older than the age limits set out in the Status of the Armed Forces Military Personnel (EMFAR), and that these limits should not be based on "roles but rather on specialties".

As for the commitment with the EO and the signing of protocols, A.A Coelho (op. cit.) agrees "with the ideas presented here. A reserves system will have to offer more than prestige to attract employers, within reason, of course".

In regards to financial and tax support packages, L.M. Fragoso (op. cit.) stressed that "we must present the company with a win-win solution".

Regarding the need to inform employers that the reservist will be "called up", L.V. Pinto (op. cit.) agrees that "there must be a specified minimum advance notice" and M.F. Martins (op. cit.) adds that "the company's competitiveness must not be jeopardised".

Referring to the incentives provided, specifically certified training, J.L. Nascimento (face-to-face interview, 1 March 2019) notes that the "law that regulates training [...] requires companies to provide 35 hours of training per year. If I attend a certified course in a unit [...] it could count towards the company's training time".

As for the possibility of offering a military pension or having the time on reserve duty count towards retirement, J.A. Pinheiro (op. cit.) states that "they (VR) should be compensated for their service" and A.A Coelho (op. cit.) agrees that "it makes sense to have the time on reserve duty count towards retirement".

With regards to healthcare, J.A. Sousa (op. cit.) emphasises that "the need for life insurance must be accounted for", and J.A. Pinheiro (op. cit.) stresses that "medical care must be available during reserve duty in case any workplace accidents occur".

Furthermore, the incentives package "should include an incentive scheme to compensate reservists for their service" (L.M. Fragoso, op. cit.).

As for "career" progression, M.F. Martins (op. cit.) states that "this option should be explored on a case-by-case basis, depending on the skills reservists acquired as civilians, and could even include a change of category. It should not be applied wholesale".

6.4.4. Training

All interviewees agree that reservists should be given refresher training, although J.A. Sousa (op. cit.) adds that, while attendance is mandatory for reservists who have been off active duty for over than five years, "some military personnel who have been off active duty

for less than five years [...] may also need refresher training".

Referring to participation in specialisation courses, promotion courses or annual exercises, L.V. Pinto (op. cit.) states that reservists should attend "short technical courses" and J.A. Sousa (op. cit.) proposes that these courses "be included in the large annual exercise".

6.4.5. Resources (human, financial and material)

All interviewees agree that human resources should be optimised from a financial perspective. L.M. Fragoso (op. cit.) proposes "using the same system as the regular reserves" and J.A. Pinheiro (op. cit.) argues that "supplements should be awarded, but not necessarily the same ones".

Likewise, all interviewees agreed that facilities and equipment should be shared between reservists and regular forces to optimise resources, and J.A. Pinto (op. cit.) stresses that they should use "resources that are already available".

7. Proposal of a Volunteer Reserve system for the Portuguese Armed Forces

The analysis of the information requests to other countries showed that the initial variables should be kept, as they were deemed to be suitable, feasible and acceptable, and the interviews confirmed their applicability (Figure 7).

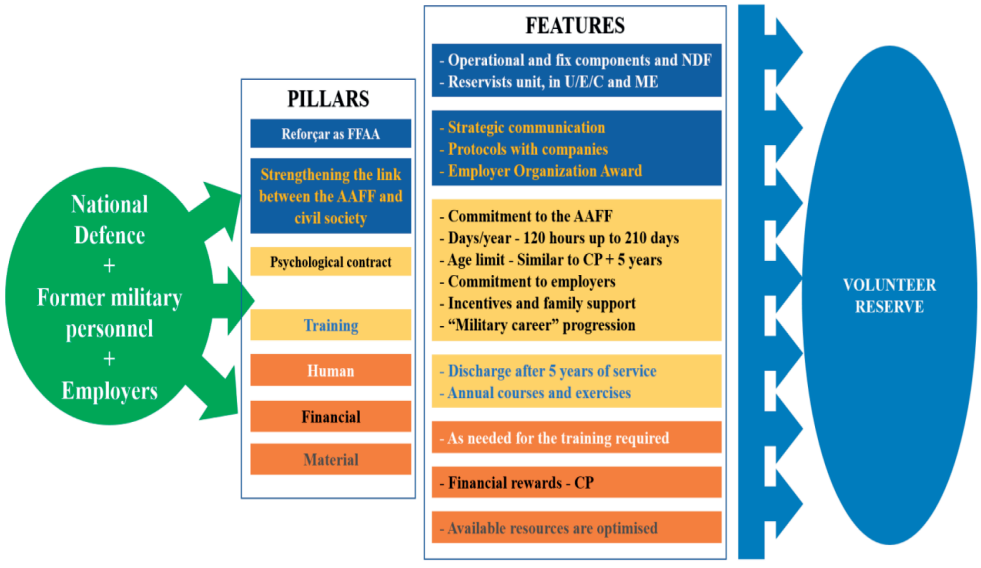

Figure 7 – Proposed system

However, the features of a future concept of Volunteer Availability Reserves (listed in Figure 7) should bear in mind three conditioning factors, which are inextricably linked:

– The crucial role of the National Defence authorities in implementing a future system. As L.M. Fragoso (op. cit.) states, "the State must be interested in the idea. In my opinion that is the greatest challenge";

– The willingness of former military personnel to embrace a project of this nature. As L.M. Fragoso points out (op. cit.), "many service members, especially in the officers category, would be interested in adhering if the conditions were created";

– Promoting reserve service to EO. As V. Pinto (op. cit.) notes, "if the Portuguese businesses and labour unions are not interested, this type of system will prove very difficult to implement".

Figure 8 summarises the study so far.

Figure 8 – Features of a future reserve system

Based on the study findings so far (summarised in Figure 8), any proposal for a future system must include some genetic, structural and operational strategy considerations (Figure 9).

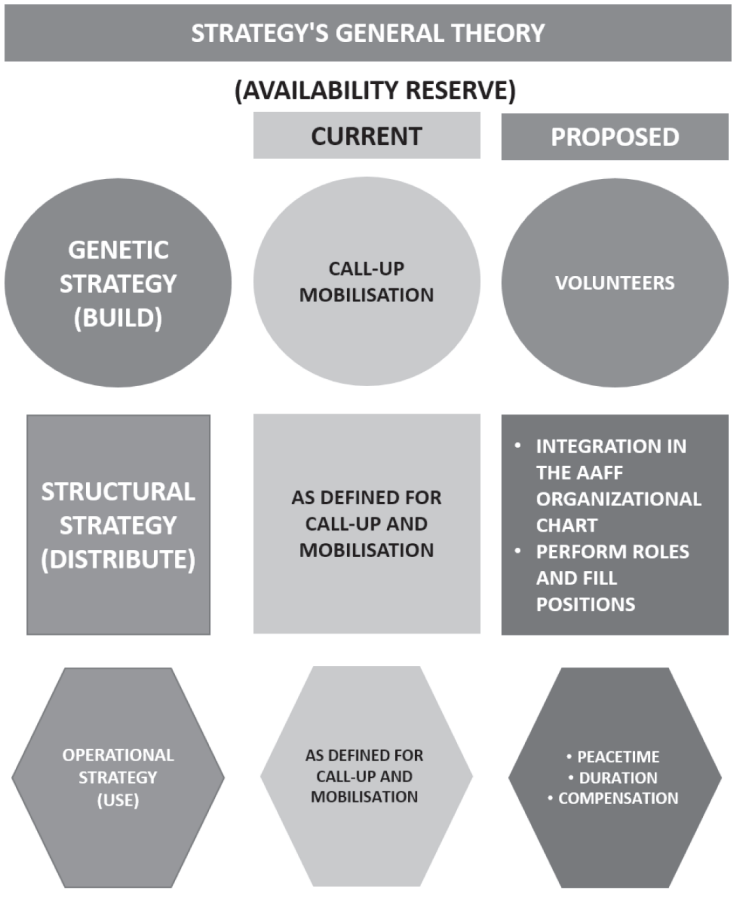

Figure 9 – VR development strategy

To operationalize the strategy illustrated in Figure 9, a concept of Extended Reserve must be defined that accounts for the scenarios illustrated in Figure 10.

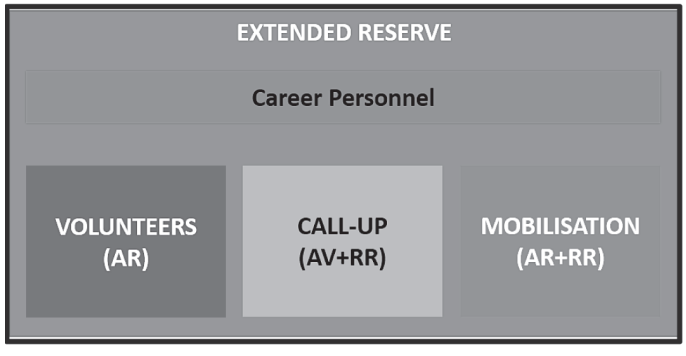

Figure 10 – Proposed extended reserve structure

8. Conclusions

Portugal does not have a mandatory call up / mobilisation system that can be used in peacetime, nor does it organize training and exercises to test existing processes. This limits the country's ability to respond in a rapid, appropriate and coordinated way to situations of war and prevents it from building national resilience.

This study used the analysis model to assess the data drawn from the RFI, the literature review, and the content analysis on the answers of the nine experts interviewed, thus achieving the initial objectives.

Specifically, the collected data served:

To analyse the Portuguese AR system in terms of purpose, processes and resources, and assess it in terms of Suitability, Applicability and Acceptability;

– To describe the VR systems of four NATO countries (France, the Netherlands, Italy and the United Kingdom);

– To define a set of features to be included in a future VR system for the Portuguese AAFF.

Furthermore, the combined analysis of these three SO achieved the GO, *To propose a Volunteer Availability Reserve system for the Portuguese Armed Forces*.

The findings showed that, in terms of:

– Suitability, the existing system suits the purpose it was designed to accomplish (call up), however, the processes and resources involved should be examined and explored to ensure that the strategic goals (both structural and genetic) are met.

– Feasibility, the system has not been tested by the branches since the SMO was abolished. However, this can be done as part of the Army's training and education programme. As for the staff required to administer refresher courses, training and exercises, Decree-Law 40/2019 (which sets out the annual staff numbers) does not define a specific pool from which to select that staff.

– Acceptability, the compulsory nature of the national system has conditioned its applicability, as demonstrated by the Air Force's attempt to call up OPSAS to address a shortage of these specialists.

The collected data also showed that the idea of a VR has met with general approval and is considered applicable. It is perceived as an opportunity to strengthen the link between the AAFF and civil society, to keep former military personnel linked to their branches, enhancing the spirit of citizenship and the national resilience. Notwithstanding this, any future system will always depend on the interest of the authorities, of former military personnel and of EO.

Furthermore, the study showed that, in order to enhance its capabilities, the AAFF must improve their relationship with EO, which in turn will strengthen the role that both play in the National Defence system. In other words, these exchanges and "sharing" of employee-reservists will strengthen the link between the Defence system and the business community.

Furthermore, the study identified features that may be included in a future VR system to be implemented in Portugal:

– The use of VR in the operational and fix components and in the NDF, both as a reservist

unit or integrated in the U/E/C and have Staff roles;

– Advertising and disseminating information about the VR;
– Establishing protocols with reservists and EO;
– Providing incentives schemes and "career" progression;
– Ensuring that reservists receive appropriate training;
– Allocating the necessary resources (human, financial and material).

The main **limitation** of this study, which was outside the researchers' control and did not significantly affect the value of the collected data, was the fact that some RFI were met with a refusal to share information. This difficulty was largely overcome by consulting the websites of the Ministries of Defence and the branches of the four analysed countries.

Bearing in mind that the interviews revealed that the idea of a VR would be well-received, **future studies** should:

– Survey current and former military personnel (V/C/SC) from the three branches of the AAFF to assess if they would adhere to this new concept of reserves;

– Identify the ideal EO to welcome this concept, which can be either public or private and range from micro companies to small, medium, large or multinational companies. It could also be of interest to assess how the idea would be received by companies who employ former military personnel.

Although this study proposes features that can be included in a future VR system for the AAFF, the relevant authorities must first consider / examine how it can be implemented in an optimised manner. Therefore, the practical recommendation of this study is that the General Staff of the Armed Forces:

– Analyses the changes that would have to be made to the AAFF genetic, structural and operational strategies in order to implement this concept in each branch;

– Determines the classes / arms / services / specialties, categories and ranks available to former service members who join the VR, by branch;

– Submits to the Ministry an annual staff and budget plan for the VR, to be published in the annual Decree-Law that defines the AAFF staff;

– Defines a minimum annual length of service in the branch and in activities on national territory (e.g. participation in annual exercises and military ceremonies);

– Explores the concept of Extended Reserves;

– Presents to the Ministry the amendments that must be made to the legislation to approve and develop this new concept of reserves (e.g. how they are called up, which bodies are responsible for the national dissemination of this new concept of reserves and for calling up the reservists authorised in the staff plan and budget).

Finally, this study suggests that the Ministry of National Defence identifies and develops measures to attract and motivate reservists, as this will allow the AAFF to strengthen the linkages to the business sector and establish closer links with civil society.

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