

REVISTA ESPAÑOLA DE DEFENSA

NATO Enhanced Forward Presence

MISSION IN THE BALTICS

AFGHANISTAN
The last contingent
returns after 20 years



DETERRENCE IN THE BLACK SEA

Spanish Air Force
accomplishes its first NATO
air policing misión
in Romania



REVISTA ESPAÑOLA DE DEFENSA

HABLAMOS de Defensa

30 años de información de calidad

A reliable and significant ally

SPAIN is a major contributor to NATO missions and activities and has become a reliable and influential ally. It is aware that the Alliance is the most important defensive organisation on both sides of the Atlantic, capable of keeping its citizens safe, as well as promoting stability beyond our borders and preserving the democratic values of the societies it represents.

Spain's participation in NATO missions is significant. Thus, our Armed Forces support the security of the seas, integrated into high readiness task forces to respond to crisis situations; they show their solidarity with the allied nations in the Baltics which, due to their geographical location, perceive the instability of Eastern Europe with greater concern; protect the population of Adana (Turkey) against possible ballistic missile attacks from Syria; and strive to open up a space in disadvantaged countries in which citizens can reclaim their sovereignty and enjoy a future of peace and hope, as they are now doing in Iraq and as they did in Afghanistan until the withdrawal, in May of this year, of the last contingent deployed in that country.

It should be noted that, following the withdrawal, Spain remains firmly committed to its allied partners and to the Afghan people in the face of the uncertain evolution of the conflict, and has proposed the establishment of a NATO-Afghan security and defence partnership. This cooperation framework will help move ahead towards a lasting, comprehensive and inclusive peace agreement that will put an end to the violence, safeguard the human rights of all Afghans —particularly women, children and minorities—, uphold the rule of law and ensure that the country will never again be a safe haven for terrorists.

The aim is to continue providing support to Afghanistan and its institutions while defending the achievements made over the past two decades. In this regard, 27,000 Spanish service members have been stationed in the Asian country for almost two decades and have contributed to this task, albeit having to pay the high and painful price of losing 102 men and women in the operation.

Our country is also actively involved in various NATO activities, such as those aimed at arms control, the fight against climate change, the promotion of human security and equality between men and women, the Alliance being one of the main driving forces behind the United Nations Women, Peace and Security Agenda in this regard.

RED



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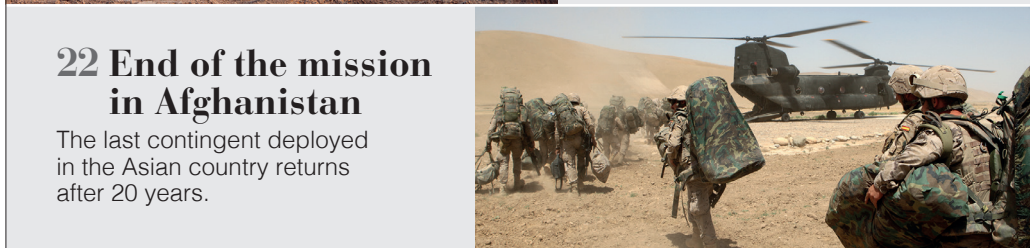


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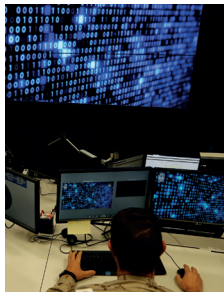
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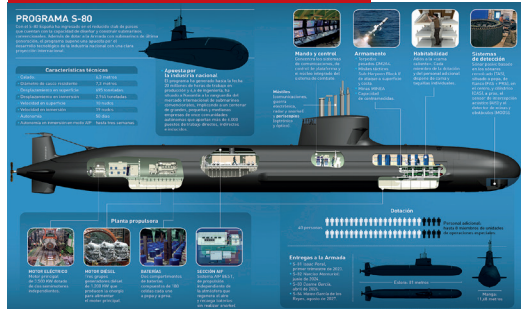
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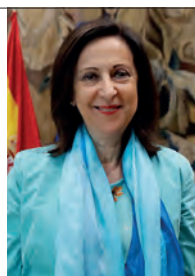
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Margarita Robles
Minister of Defence

Operation *Balmis*: One year on

One goal: to help save lives

OUR service members have written an exciting chapter in Spain's recent history thanks to their excellent management, coordination, planning and deployment in the fight against the coronavirus, demonstrating that in the most difficult and adverse moments the Armed Forces always stand side by side with Spanish society, of which they are part and which they serve.

The pandemic has been one of those events that require all of a State's resources to be brought into play. Naturally, the Armed Forces are part of these resources, and Operation *Balmis* and *Mission Baluarte* have been very illustrative of the role that the men and women of the Army, Navy and Air Force can play in a health crisis of such magnitude; namely, a close, reliable, versatile and, above all, human and generous role.

The values of our men and women in uniform include discipline and a spirit of service and sacrifice, and the organisation they belong to is conceived and designed to overcome all challenging situations, including pandemics. March 14th 2021 marked the first anniversary of the declaration of the state of alarm, adopted in order to manage the health crisis that ensued from this pandemic.

Just one day later, on 15 March 2020, the first coordination meeting was held at the Ministry of Defence to address the measures to be implemented by the Armed Forces to battle COVID-19, agreeing to appoint the Chief of Defence (CHOD) as the unified commander who, through the Operations Command, would integrate the operational, health, logistics and infrastructure capabilities of the

Military Emergencies Unit (UME), the Inspectorate-General for Defence Health (IGESAN) and the operational structure of the Army, Navy and Air Force.

At this meeting, it was also decided to task the UME, in those first hours, to conduct preliminary site surveys in the urban areas where contingents were deployed (Madrid, Valencia, Seville, Zaragoza, León, Las Palmas and Santa Cruz de Tenerife). This was the embryo of what a few days later would be called Operation *Balmis*, in honour of the military doctor and surgeon Francisco Javier Balmis (1753-1819), who travelled around the world disseminating the smallpox vaccine.

Military members were among the first to take to the streets to fight this terrible pandemic that we continue to endure today, from the smallest villages to the largest cities. Always ready to act, 24 hours a day, seven days a week, during the 98 days of Operation *Balmis* - the greatest military effort and deployment ever undertaken in peacetime in our country - the Armed Forces conducted 20,000 interventions in more than 2,250 towns and cities, showing the public why they can be relied on. They worked in disinfection tasks throughout Spain, in essential services, ports, airports,

nursing homes and hospitals; in inter-hospital patient transfers, or transporting moderate patients to medicalised centres such as Madrid's international trade fair centre (IFEMA) or hotels established for this purpose. They also collaborated in setting up and maintaining field hospitals, transporting technical resources and personnel, using all their health capabilities and providing support to the State Security Forces. All with a single

*Military
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to confront this
terrible pandemic*

goal: to help save lives and assist the Spanish people. In addition to these endeavours, on 23 March, they were also tasked with the tough mission of helping in the transfer of the deceased to facilities such as the Palacio de Hielo (ice skating rink), the Ciudad de la Justicia (City of Justice) and Majadahonda (a satellite town on the outskirts of Madrid). A mission in which each of the deceased was treated as if they were a colleague, in the knowledge that their relatives could not be with them in their final farewell. The men and women of the Armed Forces respectfully accompanied the coffins and even said a prayer when they knew the person was a believer.

Although we are beating this pandemic thanks to the joint efforts of society and the implementation of the vaccination campaign, the men and women of the Armed Forces were aware since the outbreak of this epidemic that still afflicts us today, that no one should be alone in this battle against COVID. We must all join together and follow the example set by citizens in that first lockdown, who courageously endured feelings of isolation and while following health experts' instructions at all times.

Throughout this year, our military and health personnel have not stopped working for our citizens against the coronavirus. After this first stage of Operation *Balmis*, a new mission began on 30 September 2020 —*Mission Baluarte*— which, in collaboration with the Health Ministry and the Health Departments of the different Regional Governments, has enabled tests to be carried out on an ongoing basis for the early detection and tracing of all suspected cases or those clinically compatible with COVID-19. Furthermore, during this time, the disinfection of retirement and nursing homes with a high incidence of infections has not ceased, in an attempt to protect the most vulnerable, our elderly, to whom we owe so much.



Rafael Navarro

COVID-19 has taught us the reality that the security challenges faced by modern societies require a multidisciplinary and cooperative response, while strengthening security and defence systems, with a particular focus on issues such as solidarity, responsiveness, readiness and guaranteeing essential supplies. Just a fortnight after the declaration of the state of alarm, an Air Force *C-130 Hercules* aircraft carrying medical supplies from the Czech Republic landed at Torrejón air base in response to the request made by the Spanish government to NATO's Euro-Atlantic

Disaster Response Coordination Centre. Many more were to follow.

The effectiveness of the intervention of the Armed Forces is beyond doubt, as the current health crisis has shown. Today, thanks to the affection and solidarity shown to the deceased and their families, to the sick and to the people who have been left alone as a result of the pandemic, the whole of Spain knows that the men and women of our Armed Forces will be on the front line, wherever necessary, and with the same dedication and generosity as always, working for a better future.

Our soldiers are there for everyone and serve everyone.

By irrupting onto our streets, the men and women of the Military Emergencies Unit, the Army, the Air Force and the Navy, with their uniforms of different colours: black, brown, blue and white, have ensured that their presence has helped unite wills and foster that spirit of collective solidarity that is so essential to overcome a crisis. Thank you for your commitment, solidarity and dedication! Thank you for always being there for the most vulnerable! Your hard work has undoubtedly contributed to writing an exciting chapter in Spain's recent history, a chapter for which Spanish society will always be grateful to you.



Verónica Povedano/Congreso

The Minister of Defence talks to Committee members who attended the parliamentary session on 10 March.

[international missions]

Information on OVERSEAS MISSIONS IN 2020

Margarita Robles presents the main developments in Spain's international operations to Congress and thanks service members for their work in a "very difficult" year

“THE Armed Forces’ international operations provide added value to Spain’s external action and are proof of Spain’s unwavering commitment to peace, freedom and security”. This was the statement made by Defence Minister Margarita Robles when she appeared before the corresponding Congressional Committee on 10 March to report on the development of the fifteen operations deployed outside national territory during 2020. According to documents sent by the Ministry to the Lower House, 2,464 military personnel were participating in these operations as of 1 February 2021, 368 more than in June of the previous year.

Robles expressed her “gratitude” to the men and women assigned to missions abroad for their work in a “very difficult” year due to the pandemic. “Many of them”, she said, “have been infected; others have had to be isolated because of the risk of infection; and all of them have experienced the worry of being distanced from their families”. The COVID-19 crisis has necessitated the adoption of strict protocols covering prevention, movement control and confinement periods to ensure the health safety of our troops; it has also led to delays in some contingent reliefs, the temporary withdrawal of non-essential personnel from some missions and the reduction of some maritime deployments.

“Our Armed Forces”, she stressed, “help to promote human rights and to advance justice, diversity, equality and the full participation and integration of women in some societies”. In this regard, Robles highlighted Spain’s contribution to the implementation of United Nations Resolution 1325 on Women, Peace and Security, which commemorated its twentieth anniversary in 2020.

EURO-ATLANTIC AREA

Referring to NATO-mandated operations in the Euro-Atlantic area, the Defence Minister pointed out that Spain maintains a mechanised ground force in Latvia, with the necessary support units, as part of the *Enhanced*



Above, a *Cougar* helicopter belonging to the *Toro* detachment deployed at Iraq's Al Asad airbase and Spanish troops of NATO's *Enhanced Forward Presence* mission in Latvia. On the right, a crew member of *ESPS Reina Sofia* in the Indian Ocean as part of *Operation Atalanta*.



Above, a EUTM-Mali force protection exercise in Koulikoro and a Blue Helmets patrol in Lebanon. Below, transporting personnel in a C-295 aircraft from the *Marfil* detachment in Senegal and training of local forces in EUTM-Somalia.



Spanish service members took part in fifteen operations on four continents



Orión detachment personnel deliver toys to a school in Djibouti. Below, patrolling in southern Lebanon to monitor the demarcation line with Israel.



Forward Presence (eFP), which is integrated into the multinational battalion deployed there. “This mission is the largest reinforcement of the Alliance’s collective defence to date and contributes to guaranteeing the security situation against external threats in this area”, noted Robles, who explained that, after reducing its activity due to the pandemic, the battalion is now regaining its capability levels, as well as its instruction and training tasks.

Spain also contributes to NATO’s *Enhanced Air Policing* mission. In 2020, it provided a detachment operating from Siauliai, Lithuania, with six *Eurofighters* from the 15th Fighter Wing at Zaragoza. In 2021, it is contributing two non-simultaneous detachments: one in south-eastern Europe and the Black Sea, stationed in Constanta (Romania), under the control of the Combined Air Operations Centre at Torrejón (CAOC-TJ), with six *Eurofighters* from the 11th Fighter Wing at Morón de la Frontera (Seville); and another in the Baltic, again in Siauliai, with six *Eurofighters* from the 14th Fighter Wing at Albacete.

Last year, in Bosnia and Herzegovina, nine Spanish military personnel took part — three every four months — in the European Union’s stabilisation and advisory operation *EUFOR Althea*, under the Berlin Plus arrangements between the EU and NATO. They were stationed at headquarters in Mons (Belgium) and Sarajevo (Bosnia and Herzegovina).

Similarly, Spain has continued to participate in Standing NATO Maritime Groups (escort vessels). Spain commands NATO Maritime



Friendly approach to a fishing vessel to obtain information on possible pirates off the coast of Somalia. Below, a force protection unit of NATO mission Iraq (NMI) prepares to conduct an escort in Baghdad. On the right, the CIMIC team of the EUTM-Mali mission hands over audiovisual equipment to the Association of Young Deaf People for Development.





Personnel from the *Tajo* minehunter, part of SNMCMG-2.

Group 2 and will take command of the Standing NATO Mine Countermeasures Group 2 in July, both of which form the basis of the NATO Response Force. At different times of the year, a number of naval and air units are integrated into NATO's maritime security operation *Sea Guardian*, which fights terrorism across the Mediterranean. Spain's contribution consists of maritime patrol aircraft, a submarine, an off-shore patrol vessel with a special operations team, a flagship for focus operations and associated support vessels.

Under NATO's Operation Support to Turkey, Spain protects the civilian population of Adana —a city of two million people— from possible ballistic missile attacks from Syria. It has deployed a *Patriot* battery for this purpose, which is part of NATO's collective defence plan.

MIDDLE EAST AND ASIA

The eastern sector of the UN mission in Lebanon (UNIFIL) has been led by Spain since 2006, and the reduction in joint patrols with the Lebanese Armed Forces (LAF), due to the pandemic, has been compensated for by implementing less critical actions with personnel from our Brigade alone. The Spanish

contingent also supports the training of Lebanese units to improve their operational capabilities, and carries out collaboration and support activities for the civilian population that will help promote development and stability in the region. Solidarity with the Lebanese population was reinforced by the Brigade's assistance in removing debris and the rebuilding process following the 4 August explosions in the port of Beirut. Sapper units, medical assistance and logistic support were provided. "It was the first time that a contingent was authorised to leave UNIFIL's area of operations, and it highlighted how the Spanish Armed Forces stand at the side of those who suffer", emphasised Margarita Robles.

*The pandemic
has necessitated
prevention
protocols and
confinement
periods*

In Iraq, as the nation's forces improve their capabilities, the objectives of the international coalition against *Daesh* are being met. This has made it possible to close some bases, such as the *Gran Capitán* base in Besmayah, which was handed over to local authorities on 25 July after having trained 50,000 soldiers. From now on, NATO *Mission Iraq* (NM-I) will be progressively reinforced in coordination with the Iraqi government. It will succeed the coalition against *Daesh*, taking on a greater role in its core institutional advisory role. During the transition, Spain will slightly increase its participation in this operation, while continuing to reduce its troops in the other mission.

In Afghanistan, despite progress in the training and capability development of the Afghan security and defence forces, the complex situation of widespread violence, with clashes between the Taliban and security forces and attacks on the population, creates uncertainty about the process of reaching a national peace agreement. "What NATO partners are clear about", Robles said, "is that we cannot waste all the hard work that has been done in terms of human rights and women's equality in a country where so much progress has been made, especially in human rights, as the result of international contingents".

AFRICA AND THE AMERICAS

Spain's Armed Forces also contribute to EU training missions in Mali and the Central African Republic. The first of these, EUTM Mali, aims to improve the training, capability development, modernisation and integration of the country's security and defence institutions, and to enhance the role of women in society. However, this process has significantly slowed down, first by the pandemic and then, in August, by the coup d'état. The impact of COVID-19 forced the deployment of almost half of the members of the Spanish mission, in coordination with the Malian authorities and the other contributing countries; capabilities began to be recovered in November and by mid-December they were declared as fully recovered.



A EUTM-Somalia instructor works on one of the courses for platoon and company leaders.

A Spanish senior officer, Brigadier General Fernando Luis Gracia, is in command of EUTM Mali since 12 January. "We will continue to contribute troops and capabilities if the political and health situation in the country gradually normalises," said the Defence Minister.

In the Central African Republic, a stable situation has not yet been reached and is subject to using dialogue to find a political solution. Spanish service members carry out various political, strategic and military advisory tasks in EUTM RCA; however, the impact of the pandemic has been significant and activity has been limited to advising the Ministry of Defence and the Army, Navy and Air Force Headquarters.

From Dakar (Senegal), the headquarters of the Marfil air detachment —into which the *Mamba* detachment, stationed in Gabon, was integrated in March 2020— Spain is making a logistic effort to support the missions deployed in the Western Sahel. *Marfil*, which has two C-295 tactical airlifters, has so far transported 39,000 military personnel and 6,000 tonnes of cargo.

Robles explained that, due to COVID-19, cooperative security activities in countries

of interest to Spain had been reduced; these activities aim to strengthen the countries' military capabilities so that they can address their security challenges. In 2020, only those planned for March and, in the cases of Senegal and Mauritania, those planned for November and December, were carried out. In addition, two Off-Shore Patrol

Vessels were deployed, in a more reduced way due to the coronavirus, and they conducted combined cooperative and maritime security operations with countries in the Gulf of Guinea.

Spain remains present on the East African coast through EUTM Somalia on land and EUNAVFOR *Atalanta* at sea. In the first mission, Spanish military members advise the defence authorities and train Somali units, although the political and security situation has limited training activities. In the second, Spain maintains its leadership in the area of operations and will continue to exercise its Operational Command from the headquarters of Rota naval base. The Sea Force Commander, a Portuguese national, is aboard the Spanish ship *Castilla*. *Atalanta* provides security for vulnerable maritime traffic, in particular, for ships carrying aid from the UN World Food Programme, Nobel Peace Prize 2020.

In the Americas, nine Spanish observers participated last year in the UN Verification Mission in Colombia; they were spread across different areas of responsibility and verified the social reintegration process of former FARC combatants.

Santiago Fernández del Vado
Photos: Defence Staff HQ



Members of the *Althea* mission pay tribute to the Spanish soldiers who lost their lives in Bosnia-Herzegovina.



Two Spanish *Eurofighters* on the runways of the Romanian *Mihail Kogalniceanu* air base. The air weapons specialists and the

DETERRENCE in the Black Sea

Spanish Air Force accomplishes its first NATO air policing mission in Romania

STATIONED at the *Mihail Kogalniceanu* air base near the city of Constanta in Romania, 130 Spanish aviators have spent two months forming part of the *Paznic* (guardian in Romanian) detachment to reinforce NATO's air policing mission in the Black Sea. Six *Eurofighter* jets have worked in coordination with Romanian aircraft in this endeavour under the supervision of the Combined Air Operations Centre at Torrejón (CAOC-TJ).

This is the first time that Spain has sent its fighters to the southeast of Alliance territory under NATO's enhanced Air Policing (eAP) mission, adopted in 2014 as a deterrence and defence measure after Russia's annexation of Crimea.

From 1 February to 31 March, the detachment conducted around 400 flights in Romanian airspace, participated in two international naval exercises (*Poseidon* and *Sea Shield*), and underwent training with Romanian

F-16s and *Mig-21s*, as well as with French *Rafales*.

The commander of the Spanish detachment, Lieutenant Colonel José Enrique Hernández Medel, highlights the hospitality accorded to them by the Romanian Air Force. "They have made every effort to help us. They really appreciate the possibility of working side by side with other NATO countries as it gives them another insight and helps them to update their tactics and

*The Eurofighters
of the Paznic
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conducted 400
flights in Romanian
airspace*

procedures, and this mutual training has been very beneficial for both parties". In particular, for the 11th Fighter Wing —the unit of origin of the majority of the members of the *Paznic* detachment— this mission has been, according to Lieutenant Colonel Hernández Medel, "a reinforcement of our expeditionary capability and an opportunity to apply theoretical procedures to real missions".

This was confirmed by the Chief of Defence (CHOD) during his visit to the contingent on March 24. Admiral General Teodoro López Calderón congratulated its members for their "professionalism, readiness and ability to overcome the challenges involved in an initial deployment, especially in a pandemic situation". "You are", he added, "the best example of our commitment to the Alliance and to global security". The CHOD met with his Romanian counterpart, Lieutenant General Daniel Petrescu. They both underscored the excellent bilateral relations in the defence field and their cooperation and contribution to shared security as NATO and EU members.

INTERCEPTS

On March 5, NATO reported that *Eurofighters* from the *Paznic* detachment had the previous day accomplished their first real mission intercepting two Russian fighters. "During a QRA alert mission, our *Eurofighters* intercepted and identified two Russian *Su-30* military aircraft that were not identifiable by transponder signal, no flight plan



maintenance team have ensured that the aircraft are always ready to take off in case of alert. Right, during a flight over the Black Sea.

had been filed and civilian Air Traffic Control was not able to track them”, said Lieutenant Colonel José Enrique Hernández Medel.

The Spanish jets shadowed the Russian aircraft “demonstrating NATO’s ability to quickly respond to situations arising near Alliance air space”, said NATO’s press release. Once the Russian aircraft turned away and headed back north east, our Eurofighters returned safely to their temporary home base on the Black Sea shore.

The Operations Commander of this detachment, Major Alfredo Jiménez Díez-Canseco, a veteran of the air policing missions in Estonia and Lithuania, states that they have faced a different scenario in Romania. “Unlike what happens in the Baltic countries, Romania’s Air Force is capable of conducting the air policing mission in its area of responsibility. Our job has been to strengthen and improve their capabilities”, he explains.

The type of flights detected over the Black Sea is also different: “In the Baltic they are transit flights between Kaliningrad and Russia, while here they are usually military operations and training flights”.

The Eurofighters have been ready 24/7 to respond to any missions assigned to them

from NATO’s Combined Air Operations Centre at Torrejón (CAOC-TJ). The QRA sorties are only activated by the CAOC after the NATO Air Defence System detects an unidentified track or air traffic behaving abnormally. In these situations the QRA aircraft are ordered to intercept and identify the track acting according to International regulations.

“We have been ready 24 hours a day to perform any QRA missions and scramble our Eurofighters in less than 15 minutes”, says Commander Díez-Canseco. “Every day”, he continues, “we have conducted a training mission simulating these missions”. During these operations, not only the pilots have been trained but also all the members of the detachment, including mechanics, controllers and support, operations and health staff.



The CHOD, Admiral General López Calderón, talks with Lieutenant Colonel Medel during his visit to the detachment.

“The Eurofighter is an aircraft that responds well and is easy to handle”, says Lieutenant Tamara Martín Sandaza, head of the detachment’s engineering area. A team of over 60 people has been under her command, including linemen (in charge of launching and recovering the aircraft once they have landed after completing their mission), members of the inspection and maintenance areas and, finally, the air weapons specialists, responsible for the maintenance and installation of cannons, flares and missiles.

AIR AND MARITIME EXERCISE

On March 24, Spanish and Romanian fighters joined exercise *Sea Shield '21*, with the participation of Spanish ESPS Méndez Núñez, as the flagship of the Standing NATO Maritime Group 2 (SNMG-2), and forces from other allied countries. NATO Combined Air Operations Centre (CAOC) Torrejón supported this exercise in the Black Sea. “This kind of activity is a way to integrate NATO assets, showing the level of cooperation in an air and maritime exercise among allies, to continue strengthening the cohesion of the NATO Alliance”, said the CAOC-TJ commander, Lieutenant General Fernando de la Cruz.

Angel Vegas
Photos: Ejército del Aire

[international missions]



Spanish *Leopard 2E* battle tanks during live-fire exercise *Iron Spear* at the Adazi training area.

GUARDIANS of the eastern flank

Spanish troops deployed in NATO's Operation *Enhanced Forward Presence* take part in three major allied forces exercises in the Baltic States





Battle tank crews from the different countries deployed in Poland and the Baltics gathered in Latvia to participate in *Iron Spear*, an annual competition that includes day and night firing demonstrations.

THE eighth Spanish rotation of NATO's mission *Enhanced Forward Presence* (eFP) has reached the halfway point of its deployment in Latvia. For the soldiers of the 1st Brigade *Aragon*, who arrived in the Baltic country in mid-January, the last three months have been a time of intense training as three major exercises have been carried out to train, unify and demonstrate the capabilities of this multinational battle group, which includes almost one thousand soldiers from ten nations.

The first in this series of exercises was *Wolverine Strike*, which achieved the highest degree of interoperability between units, as well as adaptation to the cold, snowy and icy environment. A tank company, three mechanised companies, an artillery battery as well as engineer and logistic units faced an enemy mechanised company

simulating an attack on allied forces.

Cryptal Arrow was the next exercise with ambitious training objectives. The Adazi training area was taken over by a battalion-sized opposition force led by Latvian forces and consisting of three company-sized units from the US (from eFP battle group in Poland), Germany (from the Lithuanian battalion) and the Lithuanian Army, which fought the eFP battle group in Latvia for two weeks.

Defensive and offensive actions were assessed and refereed by a multinational team of observers led by Canada, to which Spain contributed nine officers.

Another challenge was to provide the necessary conditions for the more than 2,000 soldiers deployed to operate in a COVID-19-free environment. A PCR testing campaign was carried out several days in advance for this purpose.

Finally, exercise *Iron Spear* took place during the second week of April with Latvian and Lithuanian multinational battle groups conducting day and night firing exercises with tanks and infantry fighting vehicles.

CURRENT STRUCTURE

Deployed in June 2017, NATO's *Enhanced Forward Presence* comprises four battalion-sized battle groups operating alongside host nation forces. Spain is part of the largest —Latvia's battle group— which is led by Canada and includes forces from Albania, the Czech Republic, Iceland, Italy, Montenegro, Poland, Slovakia and Slovenia. The Germans lead the battle group in Lithuania; the UK in Estonia and the US in Poland.

They are all under NATO command through Headquarters Multinational Corps Northeast in Szczecin, Poland. Headquarters

Operation eFP consists of four battle groups with more than 5,000 troops from 20 NATO countries



Units have gone through a progressive training programme, from squad and platoon level to battle group operations with mechanised company-sized units. Below, Spanish contingent *Pizarro* Infantry Fighting Vehicles (IFV).





Exercise *Wolverine Strike* achieved maximum interoperability between units, as well as adaptation to the cold, snowy and icy environment. Below, a sapper ATT.



Bg. Juan Garnacho/eRP



Antanas Gedrima

Lithuanian Deputy Minister of National Defence welcomes the commander of the Spanish contingent to the air policing mission.



DETERRENCE AND DEFENCE IN THE BALTICS AND POLAND

At the 2016 Warsaw Summit, Allied Heads of State and Government agreed to enhance NATO's military presence in the eastern part of the Alliance to deter Russia. The Alliance's strategy includes an increased fighter jet presence in the Baltic Air Policing mission.

Air policing



ITA F-35 aircraft

ESP Seven Eurofighters

TUR F-16 aircraft

NATO fighter aircraft rotate regularly to defend the airspace of Estonia, Lithuania and Latvia, which have no Air Force. Spain leads the current rotation between May and August.



○ Leading country
□ Participating country

Enhanced Forward Presence

Four multinational Battle Groups led by the UK, Canada, the US and Germany and comprising more than 5,000 troops from 20 countries. The aim is to guard the eastern flank and prepare the ground for a NATO rapid deployment force in the event of an attack on an Allied country.



ESTONIA



ISL FRA

LATVIA



ESP POL ITA SVN
CZE SVK ALB
ISL MNE

→ Spanish contribution
350 troops / A mechanised company-sized unit (6 Leopard 2E tanks, 14 Pizarro IFVs and 15 ATTs) and support and protection units.

POLAND



GB ROU
HRV

LITHUANIA



BEL PBA NOR
CZE ISL LUX

(7 April 2021)

Multinational Division North East (MND-NE) in Elblag, Poland, coordinates and oversees the activities of the four battle groups. Spain's contribution comprises 350 troops who make up a mechanised company-sized unit, a sappers unit, various posts within the Battle Group's Headquarter Command and the Latvian Brigade, and a national support element, which includes the logistic support unit.

The main capabilities provided by Spain are the *Leopard 2E* battle tanks and *Pizarro* Infantry Fighting Vehicles (IFV), as well as other mechanised resources such as the *M-113 Armoured Tracked Transport* (ATT), heavy mortars, Sapper Combat Vehicles (SCV) and *Spike* anti-tank missiles. The contingent is completed with a JTAC (Joint Terminal Attack Controller) team and a *Raven* unmanned aerial vehicle (UAV).

AIR POLICING

Since 1 May, seven *Eurofighters* from the 14th Fighter Wing and 130 Air Force service members have been helping to control and defend NATO's airspace in Estonia, Latvia and Lithuania, countries that do not have their own combat aircraft to take on this task. For four months, until the end of August, Spanish fighter jets will remain deployed at the Lithuanian

*Spanish
Air Force
deploys seven
Eurofighters
to Lithuania*

Siauliai air base on QRA (Quick Reaction Alert), ready to scramble if necessary to identify and intercept any aircraft that violates international air traffic regulations and poses a threat to the allies.

The personnel travelled to the Baltic in a 31st Fighter Wing *A400M* aircraft, which also transported some of the detachment's equipment.

After taking part in another NATO operation in Romania in February and March, Spanish *Eurofighters* are leading this rotation of the Baltic Air Policing mission, along with *F-35* fighter jets from the Italian Air Force—from Amari air base in Estonia—and Turkish *F-16s*, in this case deployed to Malbork (Poland). The Combined Air Operations Centre (CAOC) in Uedem, Germany, is responsible for operational control of the mission.

Editorial Office/Photos: NATO SHAPE

END OF THE MISSION

The last contingent deployed in Afghanistan has returned; more than 27,000



The King, the Prime Minister and the Minister of Defence greet the last Spanish soldiers stationed in Afghanistan.

Marco Romero/WIDE



N IN AFGHANISTAN

Spanish soldiers have been involved in operations in the Asian country

SPAIN has repatriated the last of its troops in Afghanistan, putting an end to the longest (nineteen years and four months) and most costly in terms of lives (102 fatalities) mission of the Spanish Armed Forces, in which 27,000 men and women took part. The repatriation redeployed the 24 military personnel and the two naturalised interpreters who had remained in the country as part of NATO's Operation *Resolute Support*. They landed on 13 May at Torrejón air base (Madrid) aboard a Spanish Air Force *A400M* transport aircraft and were welcomed by King Felipe VI, the Prime Minister, Pedro Sánchez, and the Minister of Defence, Margarita Robles.

The withdrawal of the Spanish troops has been carried out according to a plan developed in coordination with the United States and the other nations participating in *Resolute Support*. On 14 April this year, US President Joe Biden announced the unconditional and complete withdrawal of US forces, a declaration that was endorsed by the North Atlantic Council on the same day. The withdrawal was originally scheduled to end on 11 September 2021, the 20th anniversary of the attacks in the US by Al-Qaeda, a terrorist group sheltered by the Taliban on Afghan soil. However, the removal of the 3,000 US military and 7,000

Resolute Support personnel from 35 NATO and partner countries is already underway. Some countries have repatriated all their military personnel and others are doing so progressively.

ACKNOWLEDGEMENT

At the foot of the aeroplane stairs, King Felipe VI greeted the 26 members of the last contingent one by one: its Commander, Colonel Alfonso Álvarez Planelles; Lieutenant Colonel Pablo Paniagua, stationed at the mission headquarters in Kabul; fourteen special operations instructors, who were advising and training their Afghan counterparts; the eight members of the National Support Element; and the two interpreters. The *Green Berets* (the Army's Special Operations Command) were stationed at Camp Morehead, near Kabul.

**The withdrawal
has been
coordinated with
the other coalition
countries**

Once the contingent had taken its place in formation, King Felipe VI took to the rostrum to preside over the ceremony, in recognition of all the personnel deployed for almost two decades in Afghanistan. The ceremony began when the guidons of the task forces participating in the mission were brought in. Lieutenant General Francisco Braco, Commander of the Special Operations Command, then spoke, and the King received the last Spanish flag to fly in Afghanistan from Colonel Álvarez Planelles, before handing it over for safekeeping to General Jesús Arenas García, Director of the Army Museum. The Minister of Defence then said a few words and tribute was paid to the fallen. After prayers, two *F-18* fighters flew overhead.

Margarita Robles referred to all the men and women of the Armed Forces who, "with their dedication, generosity and sacrifice" have demonstrated in Afghanistan Spain's commitment to international security. She recalled the 102 soldiers who died "giving the best of themselves, their young lives, to bring peace and freedom to others".

She also apologised "from the bottom of my heart if any of their family members have felt alone or unsupported at any time". "All of Spain", said the Defence Minister, "owes a debt of gratitude to those who have returned, to those of you who are here



today, to those who have not returned and to their families”.

“Mission accomplished, Sir”, reported the Commander of the Special Operations Command to the King, assuring him that the Armed Forces had “contributed with tenacity and pride to the fight against terrorism and had helped a society that needed it”. “We have fulfilled our mission, but we have paid a high price for it”, declared Lieutenant General Braco, who also recalled the work performed in Afghanistan by the National Intelligence Centre (CNI), the Civil Guard, the National Police, non-governmental organisations, the Spanish Agency for Cooperation and Development (AECID) and Spanish companies and foundations. The event was held in Plaza del Sabre at Torrejón air base, where vehicles used by the Armed Forces in Afghanistan — *Chinook* and *Superpuma* helicopters, *RG-31* and *Lince* armoured vehicles and a *C-295* aircraft — were showcased while members of the mission units marched past.

Among other authorities in attendance were Chief of Defence, Admiral General



Marco Romero/MDR

Colonel Alfonso Álvarez Planelles, commander of the contingent, presents King Felipe VI with the Spanish flag, lowered on the previous day in Afghan territory, to be safeguarded in the Army Museum in Toledo.

Teodoro López Calderón; CNI Director Paz Esteban; Undersecretary of Defence Amparo Valcarce; Army Chief of Staff, Army General Francisco Javier Varela; Navy Chief of Staff, Admiral General Antonio Martorell; Air Force Chief of Staff, General Javier Salto; the Directors General of the National Police and Civil Guard; and

the Chargés d’Affaires of the Afghan and US embassies in Spain.

Upon completion of the ceremony, King Felipe VI greeted the families of the service members who had recently arrived from Afghanistan. At last, protocol was put to one side and the men and women in uniform, who had spent six months away

20 years, three missions

FOR two decades, 27,000 Spanish military personnel have been part of NATO forces fighting the insurgency and helping to rebuild Afghanistan.

Their work changed frequently over the years. Initially providing security in the capital, Kabul, they later expanded their presence throughout the territory to counter the insurgency, support the reconstruction of provincial infrastructure, and to train and advise Afghan security forces.

2001

→ **11 September:** Attacks on the Twin Towers in New York and the Pentagon in Washington.

→ **22 December:** Bonn Agreement; Afghan interim authority is established.

→ **27 December:** The Council of Ministers agrees to the participation of Spanish troops in ISAF.

2002

→ **24 January:** The first 350 Spanish soldiers arrive in Kabul.

2003

→ **11 August:** NATO assumes command of ISAF.

2005

→ **18 May:** Spain, in command of the Herat base.

→ **1 April:** Role 2E field hospital is commissioned.



from home, were finally able to embrace their loved ones.

A day before their return to Spain, on 12 May, the international forces bade farewell to the last Spanish contingent in Afghanistan in a simple ceremony held at *Hamid Karzai* base at Kabul airport.

This tribute, where the Spanish flag was lowered for the last time, was attended by General Austin Scott Miller, Commander of *Resolute Support*; Vice Admiral Ignacio de la Puente Mora-Figueroa, Chief of Staff of the Operations Command; and General Ángel Ramón Herrezuelo, Commander of the Joint Special Operations Command. According to Vice Admiral Ignacio de la Puente, "Spain has demonstrated its commitment to its allies at all times, with a very high level of competence that has earned it the recognition of allied and friendly countries, Afghan institutions and all Spaniards".

ONGOING COLLABORATION

The 9/11 attacks on the Twin Towers and the Pentagon were at the heart of the military intervention in Afghanistan. They drove the

North Atlantic Council to evoke, for the first time in history, Article 5 of the NATO Treaty, which requires all partners to respond to an attack against one of its members. In the aftermath of the attacks, the US began Operation *Enduring Freedom*, which aimed

28,000 patrols and 1,400 explosive ordnance disposal missions have been conducted

to topple the Taliban and put an end to Al-Qaeda bases on Afghan soil. It was joined by the International Security Assistance Force (ISAF), established by the UN Security Council to support the interim administration in charge of reconstructing the country after

the fall of the Taliban regime. ISAF was led by NATO from August 2003.

Spain participated in *Enduring Freedom* between January 2002 and July 2004. It contributed to this operation with the combat supply ship *Patiño* and frigates *Numancia* and *Santa María*, deployed in the Indian Ocean; *C-130 Hercules* transport aircraft from the 31st Fighter Wing, in the *Gemini* detachment in Kyrgyzstan; and helicopters and medical assistance provided by the Air Force Deployment Support Medical Unit (UMAD). Some 1,800 international coalition personnel and 10,800 Afghan civilians were treated at the UMAD—known as the "Spanish Hospital"—and 139 surgical procedures were performed.

As part of ISAF, the first 350 Spanish military personnel arrived in Kabul in January 2002. Since that first force, which was named ASPFOR I, more than 35 Army contingents have been deployed in Afghanistan. In May 2005, the Army took over the Provincial Reconstruction Team (PRT) in Qala i Naw, the capital of Badghis Province, in the west of the country. The Army was also deployed

→ **19 August:** Spanish troops take over the Provincial Reconstruction Team (PRT) in Qala i Naw.

2006

→ **5 October:** NATO's nation-wide expansion process is completed in Afghanistan.

2007

→ **6 March:** International Security Assistance Force and the new Afghan security forces launch their first major joint counter-insurgency operation.

2008

→ **28 July:** Spain reaches an agreement with the Government

of Afghanistan to finance and train a company of the Afghan Army and to build a barracks in Qala i Naw.

2009

→ **3 April:** ISAF contingent expands to include training of Afghan Army and Police forces among its objectives.

→ **1 October:** Spain takes over the management of Kabul airport.

2010

→ **17 February:** Congress approves the deployment of 1,549 troops, the largest Spanish contribution to the mission

→ **13 July:** *Ruy González de Clavijo* base in Qala i Naw is opened.



in Darra i Bum, Ludina, Mazar e Sharif, Moqur and Sangatesh, with helicopter and ground units, organising so-called Combat Outposts. In addition, it assumed command of Forward Support Base in Herat (FSB Herat), where it set up a Role 2 field hospital.

The Navy deployed Marine Brigade Tactical Air Control Parties (TACPs) to the various Army contingents, as well as Operational Mentoring and Liaison Teams (OMLTs) to improve the training of the Afghan Army and Police. In turn, the Air Force deployed Tactical Air Detachments, the Deployment Support Medical Unit and TACPs, and assumed command of the Herat Forward Air Base. Spain also held important positions in the various headquarters of the international coalition.

The withdrawal of the bulk of NATO troops took place between 2012 and 2013, when Spain transferred the security of Badghis Province and the *Ruy González de Clavijo* base to the Afghan authorities. Once ISAF ended on 31 December 2014, it evolved into the *Resolute Support* Mission, which had fewer troops and focused on



Marco Romero/MDE

Contingent members are welcomed by their families. In the photo, a servicewoman hugs her daughter.

training, advising, and mentoring in support of Afghan security institutions and their Security and Defence Forces. Since 2015, Spanish military personnel have contributed to General Staff tasks; they provided training and advice to Afghan national logistic bodies, the Afghan National Special

Operations Command and a Special Operations Battalion, as well as protection and security to deployed personnel. In April 2020, due to the coronavirus pandemic, all non-essential personnel were redeployed, resulting in the repatriation of 30 military personnel.

CONTRIBUTION

Over these 19 years and 4 months, the Spanish Armed Forces have contributed 27,100 soldiers to the security and reconstruction of Afghanistan. At its peak, Spain's contingent numbered more than 1,500 men and women, although it was later reduced. More than 28,000 patrols were conducted, three million kilometres travelled, over 1,400 explosive ordnance disposal missions carried out and more than 13,000 Afghan military personnel trained. "Anyone who has set foot in this land", stressed the Commander of the Special Operations Command at the event in Torrejón, "remembers the hard work of long patrols along the Lithium Route, a 105-kilometre road built by the Spanish

2011

→ **18 July:** NATO security handover to Afghan forces begins.

2012

→ **25 September:** Transfer of Spanish base *Ruy González de Clavijo*.

2014

→ **1 October:** The Spanish contingent is reinforced with 88 military personnel for security at Herat base.

→ **31 december:** ISAF operation ends.

2015

→ **1 January:** *Resolute Support* begins, a new mission focused on training and advising Afghan forces. Spain contributes 485 military personnel.

→ **25 October:** Lowering of the last Spanish flag at Herat base.

2017

→ **28 December:** Participation is extended with 95 troops.

2018

→ **28 May:** The Joint Special Operations Command (JSOC) assumes operational deployment in Afghanistan.





Casa de S.M. el Rey

Tribute is paid at Torrejón air base (Plaza del Sabre) to those who gave their lives for Spain, including the 102 who died in operations in Afghanistan.

Provincial Reconstruction Team". "Another example of our work", added Lieutenant General Francisco Braco, "was making Herat, the main airport in our area of responsibility, operational and secure. We have brought smiles to the faces of children in orphanages and schools in Qala i Naw, where we have witnessed boys and girls attending school together; we have worked to provide basic infrastructure such as electricity and water".

All in an unknown terrain, starting from scratch, with no permanent installations and with all the uncertainties this entails, but with the determination and enthusiasm that defines us". 97 service members, three civil guards and two naturalised interpreters lost their lives in the mission. Most of the fatalities occurred in the *Yak-42* plane crash in Trebizond (Turkey) in May 2003, with 62 victims, and in the *Cougar* helicopter crash in August 2005, with a further 17; other fatalities were also recorded in insurgent attacks, mostly IEDs, and in accidents.

Santiago Fernández del Vado

2020

→ **30 March:** 30 Spanish military personnel are withdrawn due to the COVID-19 pandemic.

2021

→ **14 April:** Allies agree to withdraw troops before 11 September, the 20th anniversary of the attacks in New York and Washington.

→ **12 May:** Spain lowers its flag in Kabul and the 24 soldiers and 2 interpreters who were still in Afghanistan are repatriated.

→ **13 May:** King Felipe VI, Prime Minister, Pedro Sánchez, and Minister of Defence, Margarita Robles, welcome the last contingent at Torrejón air base, putting an end to almost 20 years of Spanish missions in Afghanistan.



Fotos: Pepe Díaz y Hélène Gicquel



EMAD



The Joint Cyberspace Command ensures the freedom of action of the Armed Forces in this new operating environment

Defence in the DIGITAL AGE

CYBER-ATTACKS are silent and often imperceptible. They take advantage of any weaknesses or vulnerabilities in information systems to infiltrate them, thus affecting citizens, institutions, and even elements crucial to defence and military operations. The organisation responsible for ensuring the freedom of action of the Armed Forces in this new battlefield is the Joint Cyberspace Command (MCCE).

It is the Armed Forces' newest Command, set up in May 2020 following a merger process between the Armed Forces Communication and Information Systems Command and the Joint Cyber Defence Command. As well as performing its "cyber" functions, it can now carry out missions in control and command systems and electronic warfare that were not previously assigned to it.

"The Command is at full capacity; to this end, it has been organised creating new units by areas of expertise", explains Rear Admiral Javier Roca, Second-in-Command of the MCCE. "In the area of cyberspace, we participate in permanent operations, in Mission Baluarte and supporting operations abroad. In the area of control and command, we are involved in achieving the initial operational capability of the National Command and Control System (SC2N), the first priority of the Chief of Defence".

Among the more immediate objectives of the Command are those of increasing its staff and consolidating the future Cyberspace Combat System (SCOMCE). "This system", adds Rear Admiral Javier Roca, "will enable all of the Armed Forces to operate in full coordination and receive appropriate training to protect and defend our networks and systems in the event that they are attacked".

Spain, which in 2013 was one of the pioneers in creating a Joint Cyber Defence Command, is currently well positioned in this area, both in NATO and in the European Union. However, "in an environment as changeable as the current one where adversaries are advancing in leaps and bounds, to stay still is to retreat; some analysts already anticipate that cyberspace will soon be as important as electricity itself", warns Rear Admiral Roca.



MCCE



MCCE analysts work
24/7, monitoring the
Ministry of Defence's
networks and systems.





Ejército del Aire

MCCE personnel are part of the team tasked with verifying the integrity of the information systems at the Paznic detachment in Romania.

PROTECTION

The first duty of the Command is to guarantee the security of the networks and systems of the Ministry of Defence. As Navy Captain Manuel Alvargonzález, Chief of the MCCE Staff, points out, “we have to protect our data and information, maintain our military capabilities, and also be able to use them as a tool to ensure freedom of action in cyberspace”. All of this is carried out from the Cyber Defence Coordination and Control Centre (C4D) of the MCCE, located in a classified building at the Retamares base.

Last year, the first Cyberspace Component Command of a national operation, *Mission Baluarte* against the coronavirus, was formed under the leadership of the commander of the Operations Command (MOPS). “We literally started from scratch, with a lot of work and a lot of enthusiasm”, observes Captain Alvargonzález. “The results have been beyond our expectations. Many MCCE personnel are working on this operation 24 hours a day, 7 days a week, our main activity being to defend the Ministry of Defence’s health network. We protect and defend the networks and systems of the Military Central Hospital Gómez Ulla on an ongoing basis”.

*Network threats
are of vital
importance
in military
operations*

TRAINING

MCCE members prepare for their job through training and dedication, and most of all through their daily tasks at the Cybersecurity Operations Centre of the Ministry of Defence, the main tool of the ESP DEF CERT. In 2020, the ESP DEF CERT, operated by the Joint Cyberspace Command, analysed 713 cyber incidents among the thousands that occurred on the



Daily training and dedication improve the readiness of the troops deployed in this Command to face network threats.

Cybersecurity in the grey zone and asymmetric warfare



**Rear Admiral
Javier Roca Rivero**
MCCE Second-in-Command

TECHNOLOGICAL advances and social achievements in recent decades, together with the growing aversion to physical conflict, mean that the cyberspace and cognitive domains will be transformed into the new and predominant “battlefields” to resolve international disputes which were previously resolved through the exchange of fire between conventional forces.

In the new digital age, a new form of military confrontation is being implemented. Instead of focusing on the physical destruction of the enemy forces using tactics such as attrition or manoeuvre, adversaries’ critical points are being sought to immobilise their functioning and render them incapable of attacking, protecting themselves or defending their national interests. Ideally, the adversary will be rendered “blind, deaf and dumb”, with no freedom of action.

Cyberspace is already a real domain and, without a doubt, our Armed Forces’ most demanding and changing operating environment. It is the paradigm of asymmetric warfare and the ideal environment in which to carry out many of the

activities associated with the so-called “grey zone”. The Joint Cyberspace Command provides some different capabilities to the forces operating in the physical domains, and in future crises it will provide several military response options that are not only different but also, at times, the only possible ones.

As the grey zone activities affect the entire State, the best way forward is to work in coordination and collaboration with all of the State actors in cyberspace, namely, DSN (National security department), CCN (National cryptologic centre), INCIBE (Spanish national cybersecurity institute), OCC (Cyber coordination office), CNPIC (National centre for the protection of infrastructures and security) and the State Security Forces. Displaying unity of action, sharing information and experience, ensuring coordinated early alert among all as well as rapid pre-planned reaction are the best options to fight in cyberspace. This is what the MCCE demonstrates and practises every day. As the master Sun Tzu wrote in his famous work: “The supreme art of war is to subdue the enemy without fighting”.

Ministry’s networks and systems, almost two per day, which is significant, as the reasons for analysing them were the complexity of the incident or the number of users targeted.

Following the motto of “train like you fight”, the Command has significantly increased its Force Activity Plan, participating in many national and international exercises.

According to its commander, Coronel Francisco Palomo, “the exercises enable our groups from the Cyberspace Operations Force to improve their skills in defending national networks, systems and critical infrastructures against attacks in real time, and to provide the appropriate response”. The

focus is on realistic scenarios, leading-edge technologies and on experiencing the full complexity of a massive cyber-attack, including strategic decision-making and the related legal and communication aspects. The Cyberspace Operations Force (FOCE) is the only unit of the Force that reports directly to the CHOD and is permanently integrated in the operating structure of the Armed Forces.

Nationally, the MCCE participates as a Cyberspace Component Command in *COPEX 21*, a training activity of the Operations Command, together with its Component Commands, in a situation where immediate action must be taken in a country destroyed

by a natural disaster. It also plays an important part in the cyberspace field in the Navy’s *Marsec* and the Army’s *Toro* exercises, and participated this year in exercise *Steadfast Leda 21*, which serves to evaluate and certify whether NATO Rapid Deployment Headquarters in Bétera (Spain) can plan and conduct high intensity operations (Warfighting Corps).

Abroad, the Command participates annually in *Cyber Coalition*, the biggest cyber defence exercise organised by NATO, and in *Locked Shields*, organised by the NATO Cooperative Cyber Defence Centre of Excellence, located in Estonia, which provides the most realistic technical challenge in cyber

The MCCE is the result of the merger between the former Joint Cyber Defence Command with the CIS Command

The importance of awareness

THE most significant IT vulnerability in almost all organisations is caused by personnel who are ignorant of the basic security measures and therefore facilitate attacks unwittingly. The main methods of gaining access to a network (what the MCCE calls "attack vectors") have extravagant names such as *Phishing*, *Smishing*, *Watering-Hole*, *Man-In-The-Middle* or *Living off the land*. It is vital that users know about these attacks to protect themselves.

Hackers gain a lot from successfully compromising a user's account (even though this may not seem important), as this access enables them to move laterally through the network and compromise other accounts and resources.

In cost-benefit terms, the best investment to facilitate the resilience and security of a network is to make all users aware, a task that requires technological know-how, communication, graphic design and audio-visual skills.

To this end, and as a priority, the MCCE is responsible for the awareness of the entire Ministry of Defence. As well as sending emails to all personnel with general advice on security and cyberspace, more specific alerts are sent concerning ongoing attacks. Often these are the same attacks that target all large private or public companies via email. In addition, conferences are held for personnel in key positions, such as personnel about to participate in a mission or military attachés being sent to embassies.

In recent months many conferences have also been attended by Defence healthcare personnel to help them protect themselves against attacks such as those that occurred in civilian hospitals in Spain and abroad. Along the same lines, an information campaign is being developed with the following message: "On networks, prevention is better than cure". The campaign initially targets healthcare workers, although it is hoped to extend its focus to reach more personnel.



the Ministry of Defence on the National Cybersecurity Council for a reason", concludes Coronel Francisco Palomo.

TECHNOLOGICAL CHALLENGE

The Command has a Cyber Defence Systems unit (JSCD), whose main mission is to manage RDI in cyber defence, through a process that covers various areas of activity, one of which consists of defining the lines of research in the area of cyber defence capabilities. These lines subsequently translate into RDI projects, framed within a common policy, which are executed in conjunction with the General Directorate for Armament and Materiel (DGAM), while the MCCE takes charge of technical leadership.

This unit also acts as a technological watch in cyber defence, a function that covers both surveillance and foresight, with two main objectives: keeping up to date on relevant technologies in order to define the lines of research; and gaining first-hand knowledge of all the product families that could be useful for the MCCE and the Armed Forces, in close liaison with the DGAM's Satellite Systems and Cyber Defence branch. Along the same lines,

defence in the world. In addition, the European Defence Agency (EDA) recently organised the first cyber defence exercise to be carried out in the EU, arising from the need to coordinate actions and mutual support among the military CERTs of the EU Member States. The MCCE, as Spain's military CERT, came fifth among the eighteen participants.

Every two years exercise *Cyber Bastion* is organised, the main national cyber exercise of the Joint Cyberspace Command, which is used to test and

impart national doctrine in these types of operations.

In all of these exercises there is a real sense that the incidents are actually occurring and that there are several enemy teams on the network using their ingenuity and capabilities to defeat the Command.

International collaboration is necessary and even valued in the final score. The MCCE specialists also participate in numerous national, international, military and civilian forums and conferences. "We represent

The Command participates in Mission Baluarte against coronavirus as a Cyberspace Component Command



Joint Cyberspace Command Headquarters, at the Retamares base.



An MCCE analyst reviews the data in the Ministry's systems.



The MCCE supports Armed Forces detachments abroad.

The technology evaluation area tests cyber defence RDI products

definition of requirements, design and implementation where necessary". The Cyber Defence Systems unit (JSCD) also supports the other units, through specialised technical evaluation in the area of cyber defence, on various wide-ranging areas: from emerging and disruptive technologies, such as Artificial Intelligence, Blockchain or 5G, to more conventional security functions, such as risk analysis and information security in systems.

It also provides the technical engineering support required by the Defence, Operations and Response groups of the Cyberspace Task Force, which entails both the design, development and evolution of products and systems aimed at obtaining or improving capabilities, as well as participation in cyber exercises to implement them.

Gema Nieves
Photos: Pepe Díaz

a technology evaluation area is used to test products and check their validity. Support is provided by the Cyber Range for this purpose, enabling all types of trials to be carried out in terms of functionality, interoperability and security, in simulated environments and scenarios which are as close

as possible to the Ministry's actual networks and systems. Thanks to this experience, as indicated by Colonel José Raúl Gómez Bas, head of the JSCD, this unit "posits common, interoperable and cross-cutting architectures and technologies, while also providing support in the

Major General Rafael García Hernández, Commander in Chief
of the Joint Cyberspace Command

“CYBERSPACE OPERATIONS CAN PREVENT WARS”

The Commander in Chief highlights that people are the
most vulnerable element to cyber-attacks

SINCE August 2020, Major General Rafael García Hernández has led the youngest unit of the Armed Forces, the Joint Cyberspace Command (MCCE), responsible for ensuring freedom of movement in this new battlefield. What happens on this front line “affects all kinds of operations, whether land, air, naval or space”, says the Major General. “It is an enemy that is here to stay”, he maintains.

Proof thereof are the 700 cyber-incidents analysed because of their importance and complexity out of the thousands that were detected last year in the military sphere. “Most of them are due to simple equipment misconfigurations; only 10 percent are malware attacks, identical to those suffered by civilian society and easy to stop”, reassures the commander of this unit under the Defence Staff.

In addition to cyber defence, the MCCE is also responsible for electronic warfare and command and control; the latter being a field to which General García Hernández has dedicated most of his professional career in the Air Force. “My background has brought me here”, he points out. “In our day, there were no cyber defence courses. Back then we thought cyberspace didn’t even exist”.

—What is the mission of the MCCE?

—The Command’s *raison d’être* is to guarantee free access to cyberspace, ensure the availability, integrity and confidentiality of information and networks and, ultimately, to safeguard the Armed Forces’ freedom of action in this domain.

—It used to be called the Joint Cyber Defence Command. Why was it renamed?

—Cyberspace is a broader concept because, from the point of view of operations, cyber defence capability goes hand in hand with electronic warfare and command and control, which used to be fields of action of the CIS Command of the Armed Forces and have now been included in the same unit.

**“Whoever dominates
cyberspace and
limits the opponent’s
freedom of action
will dominate
the contest”**

—How important is network dominance today?

—Cyberspace is an area of operations that is constantly active, an environment in which actors with different interests act against the interests of states. This is yet another area of military operations that affects the rest of the land, air, naval and space domains. In the very near future, in which operations will take place in a multi-domain environment, where everything will be interrelated, the control of cyberspace will be essential to operate in these other physical or even cognitive spheres. Whoever dominates cyberspace and limits the opponent’s freedom of action will dominate the contest. Cyberspace operations can prevent wars.

—Are military members warned about the use of their social networks, their phones, etc.?

—Since the inception of the MCCD in 2013 up until its status today as the MCCE, one of the tasks entrusted to the Command has been cyberspace awareness-raising. We have always been convinced that people are the most vulnerable element of the system, and this is why awareness campaigns are designed for and disseminated to the personnel of the Ministry of Defence. They encompass all aspects



of exposure on the internet, social networks, mobile telephony, emails, as well as security measures in the use of the Ministry's general purpose network, both on national territory and in international operations.

Those who go on overseas missions assigned to key positions or, for instance, to a Defence Attaché office abroad, are specifically briefed in order to raise their awareness.

—Have cyber-attacks increased with the pandemic?

—Yes. There has been an increase in the number of cyber-attacks, which have become more complex and now focus on COVID issues.

—Can they somehow be prevented?

—The most effective measures in terms of prevention are the collaboration between all actors and the Cybersecurity Operations Centres of the various ministries, raising awareness and alerting users about basic security measures.

—What skills must the personnel of this Command master?

—On the one hand, we have generic profiles for those cross-sectional tasks affecting all units (personnel, logistics, general staff, intelligence, etc.). On the other hand, we have specific profiles in the ICT/Cyber area, to deal with issues related to cyberspace, electronic warfare, telecommunications, cyber defence, satellites and command and control. In particular, the staff in the cyber area are trained through basic, advanced and specialised courses in different areas.

—Are they involved in NATO activities?

—Yes they are. We represent the Defence Ministry in the NATO Cooperative Cyber Defence Centre of Excellence in Tallinn, Estonia. This centre develops research projects on technical, operational, strategic and legal aspects of cyberspace, and organises cyber exercises, such as *Locked Shields* and *Crossed Swords*,



facilitating training in a very close-to-reality environment. We participate in the development of these projects and exercises and also seize the opportunity to attend courses on these topics.

—Are there any similar initiatives in the European Union?

—Within the EU, we collaborate in a number of PESCO projects and participate in exercises planned and organised by the European Defence Agency (EDA). For instance, in February we took part in the MilCERT Interoperability Conference —MIC2021— where Military Readiness and Emergency Teams (MilCERTs) from 17 EU countries

“With the pandemic, we have seen an increase in the number of cyber-attacks, which have become more complex”

plus Switzerland competed in a network defence exercise, and our CERT came fifth.

However, apart from the aforementioned cyber component, the MCCE also represents the Defence Ministry in NATO and the EU in other areas of work, such as command and control, telecommunications and electronic warfare.

—Are military members ever expected to collaborate with their civilian counterparts in exceptional situations?

—Yes they are. In fact, they have already collaborated in some cases at the request of other ministries, such as the UN Climate Change Conference COP 25 or during the various electoral processes in 2019. In these cases, we supported the Cybersecurity Coordination Office of the State Secretariat for Security in detecting threats that could affect the smooth running of the elections.

In addition and also at the request of other ministries, there are cooperation plans for the protection of critical infrastructures. Apart from that, there are collaborative relations between the different state actors responsible for cyberspace. In December last year, the Operations Command organised the 1st Seminar on the Support of the Armed Forces to Civilian Authorities in a Grey Zone environment. The MCCE led the working group collaborating in cyberspace, which included representatives from the Department of Homeland Security, the National Cryptologic Centre, the Spanish National Cybersecurity Institute (INCIBE), the Cybersecurity Coordination Office, the National Police and the Civil Guard.

The seminar was welcomed by all participants who saw it as an opportunity to enhance mutual knowledge, which facilitates greater collaboration. One of the conclusions reached was that the Armed Forces' contribution, in this case that of the MCCE, is very much appreciated due to the capabilities it can provide.

José Luis Expósito
Photos: Pepe Díaz



PROTEGER



TU LIBERTAD

Hay muchas personas que defienden
la libertad que disfrutamos todos los días.



Nuestra misión, tu libertad.



The King and the Princess of Asturias, godmother of the new ship, watch the impact of the bottle of wine against the hull after cutting the ribbon.

Navantia

[industry and technology]

Launch of the ISAAC PERAL

The King presides over the presentation of the first S-80 class submarine at Navantia's shipyard in Cartagena

THE world's most advanced conventional submarine, the S-81 *Isaac Peral*, showed its bow to the Mediterranean for the first time in the open air, outside its construction slipway at Navantia's shipyard in Cartagena. Even the sail — just over half of its 81-metre length — could be seen, with its front dome adorned with a circular red and yellow rosette and its port and starboard sides also dressed in the colours of the Spanish flag. On deck, the S-81 also flew multicoloured pennants reminiscent

of those displayed by warships when participating in flagship events.

With the austerity imposed by the COVID-19 health crisis, King Felipe VI, accompanied by Queen Letizia and Their Royal Highnesses the Princess of Asturias and Infanta Sofía, presided over the symbolic launch of the *Isaac Peral* on the morning of 22 April. This is the first of the four latest generation S-80 class submarines designed and built entirely in Spain, with which the Navy is to replace the veteran S-70 class *Tramontana* and *Galerna*, in service since the early 1980s.

The presentation of the new submarine was attended, among other civilian and military authorities, by Minister of Defence, Margarita Robles; President of the Region of Murcia, Fernando López Miras; Government Delegate, José Vélez; the Chief of Defence (CHOD) and the Chief of the Naval Staff (AJEMA), Admirals General Teodoro López-Calderon and Antonio Martorell; Mayoress of Cartagena, Ana Belén Castejón; Secretary of State for Defence, Esperanza Casteleiro, and

The Royal Family with the crew of the Isaac Peral at the entrance to Navantia's shipyard submarine armament facilities.



Navantia's S-80 submarines have been designed and built entirely in Spain

the presidents of the State Society of Industrial Participations (SEPI) and Navantia, Belén Gualda and Ricardo Domínguez.

CHRISTENING OF THE SHIP

The sharp, vermillion impact of a bottle of wine on the hull of the S-81 after the ribbon was cut by the Princess of Asturias, who served as the submarine godmother, followed by the national anthem, sealed the launch of the *Isaac Peral*. A milestone described during the event as "historic" by the Minister of Defence, as a "much desired moment"

This new venture is expected to begin in early 2023, when the new *Isaac Peral*, a long-range submarine with excellent manoeuvrability at low speed and great sonar detection capacity thanks to its sophisticated sensors, and equipped with land attack cruise missiles to project naval power over land, will enter service.

It also has an advanced anaerobic propulsion or an air-independent propulsion (AIP BEST) system that uses a fuel cell system, like NASA's shuttles, where hydrogen and oxygen are combined in a chemical reaction that

a significant reduction in the number of crew members on board compared to the S-70 Series. Eight officers, 18 non-commissioned officers and 21 chief petty officers, petty officers and sailors, under the command of Lieutenant Commander Manuel Corral Iranzo, make up the initial crew of the S-81.

A BEFORE AND AFTER

"We have before us the most advanced conventional submarine in the world", said the president of Navantia in his speech at the symbolic launching ceremony of the S-81. "The S-80 class is already a reality, which gives Spain the strategic sovereignty that means joining a small group of countries capable of designing and building submarines". Germany, South Korea, China, the United States, France, Japan, the United Kingdom, Russia and Sweden have this capability, and, since 2021, Spain, "a very important year for the Navy as we celebrate the 5th Centenary of the First Round-the-World Sea Voyage", said the Minister of Defence at the entrance to the Cartagena shipyard before the Princess of Asturias cut the ribbon that made the christening of the ship official.

The launch of the S-81 was also attended by a group of Navy personnel involved in the project, including the ship's crew, as well as of Navantia and some of the 100 or so large, small and medium-sized Spanish companies whose employees have dedicated 20 million hours of production work and more than 6.6 million hours of engineering work to the development of the programme to date.

The public presentation of the S-80 Class at the end of April constitutes "the recognition", said Margarita Robles, "of the efforts of all those who have made this masterpiece". The design and construction of the new *Isaac Peral* is not only a "historic milestone", the minister added. It is also a "hopeful achievement of this country, which is capable of anything, (...) an example in



Iñaki Gómez/NIDE

The Royal Family, accompanied by the Minister of Defence and the President of the Region of Murcia, talk to some of the submariners who will embark on the S-81.

by the president of Navantia, and as "transcendental and vital" by the Chief of the Naval Staff, "not only for the defence of Spain, but also for the national industry", the latter ratified in his speech.

With the acquisition of the S-80s, the Navy intends to give the Submarine Flotilla the change of direction it has been demanding for some time in order to adapt its mode of operation during immersion to new scenarios, enhancing its integration into naval task forces and its strategic projection.

produces energy and water, enabling it to remain in deep submergence for three weeks with no need to *snorkel*, i.e. rise to periscope level, fourteen metres below sea level, to regenerate air and recharge the ship's batteries, reaching the highest levels of discretion also thanks to its very low acoustic and magnetic signature.

Another outstanding feature of Navantia's new submarines is the high degree of automation of the combat system, the platform control system and the steering system, which leads to



Iñaki Gómez/MDE

Keel crew of the vessel. On the right, Margarita Robles and Esperanza Casteleiro (SEDEF) with the commander of the Submarine Flotilla in the S-80 simulator.

Minister Robles described the programme as “a historic milestone”



Marcial Guillén/EFE

the world (...) of science, innovation, technology and the future”.

Robles also expressed her gratitude “to all the staff of the State Secretariat for Defence, headed today by Esperanza Casteleiro, to her predecessor, Ángel Olivares; the Director General for Armament and Materiel (National Armament Director), Admiral Santiago González; and the head of the programme, Captain Del Corral”.

According to the Chief of the Naval Staff (AJEMA), the new submarines provide the Spanish Navy with “the means that make it stand out in the international context, together with the projection capability of the trident: amphibious ships, marines and embarked aviation; escort ships and off-shore patrol vessels”.

With this reflection, Admiral General Martorell expressed in

Cartagena his satisfaction for being able to have submarines prepared at the highest training level to operate fully integrated in a battle group, without forgetting their traditional vocation as ‘lone wolves’, in intelligence, surveillance, special forces infiltration or maritime traffic control missions. Like their predecessors, the S-80s will continue to *hunt* surface ships and submarines, equipped in this



Moment in which the S-81 is departing to the slipway, where the launch ceremony took place a few days later.

case with up to 18 weapons systems housed in six 533 millimetre torpedo tubes. “The new submarines will have the best heavy torpedo [the DM2A4] currently available”, says Lieutenant Commander Iranzo. In addition, the *Isaac Peral* and its “sisters” will provide the Spanish Submarine Force with “the capacity, for the first time, to launch missiles”, says its commander. For example, the *Sub-Harpoon Block II* Anti-Surface missile or the land attack cruise missiles are another of the novelties offered by these latest generation conventional submarines built by Navantia.

ORIGIN AND DEVELOPMENT

The S-80 programme was born in early 2004. Twelve years later, in 2012, a deviation in the submarine’s weight book of just over 100 tonnes was detected, which forced its redesign, in which the US Navy and General Dynamics-Electric Boat collaborated, and the project was resumed in 2018, with a consequent increase in length and

displacement capacity. “Also in the number of crew members”, says the S-81 commander. From the 32 divers initially planned, the number has increased to 40, still far below the 67 who embark, for example, on the *Tramontana*. However, the first submarine of the new class will be manned by 48. “The idea is to have a larger number of crew members sufficiently trained to undertake port and sea trials”, explains Lieutenant Commander Iranzo.



The S-80 programme is the biggest industrial and technological challenge facing the national defence industry.

Once officially unveiled, the process of transferring the S-81 to the water, by means of a floodable dock, is scheduled to begin. After this manoeuvre, the “long-awaited port and sea trials” will begin, as the members of the submarine’s keel crew made clear to the Royal Family at the conclusion of the launching of the vessel.

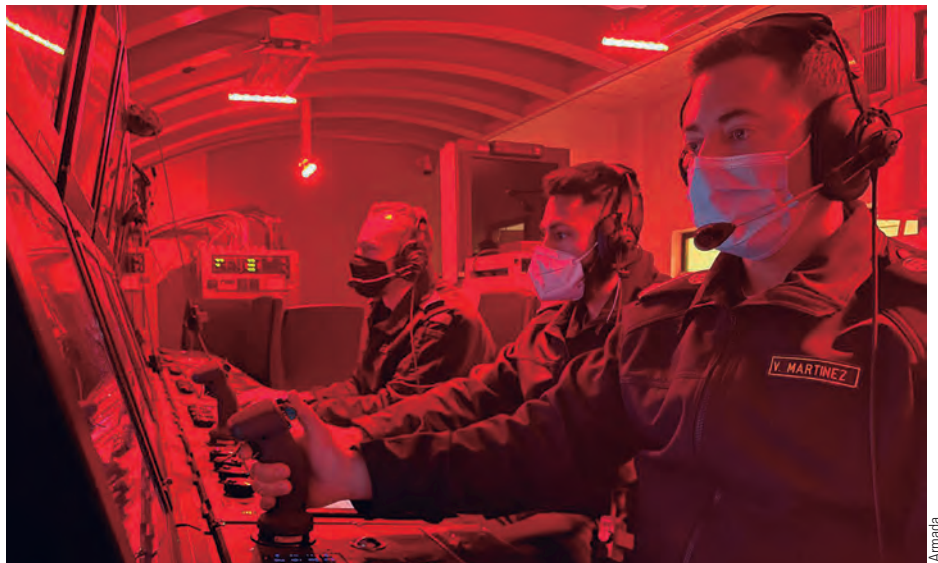
The first battery charging, the first start of the diesel engines and forward and reverse engine operations with the ship moored will be some of the tests to be carried out. “Milestones afloat in port”, as defined by Lieutenant Commander Iranzo, which will last for the next eight months. This will be followed by “the last major milestone in the construction of a submarine”, he adds —sea trials— which will last about a year, first with a surface launch and then “in static immersion, very close to La Algameca, using the same procedure as for *Galerna* class submarines (S-70) after undergoing large-scale work at the

shipyard”, he adds. If these deadlines are met, the S-81 will be available to the Navy in early 2023. While the *Isaac Peral* is being fine-tuned in the Cartagena shipyard, the rest of the S-80 class components are growing, taking shape and are getting ready to engulf the 60 kilometres of cable and 180 pieces of equipment that will be installed inside, each one in its corresponding construction slipway.

On the *Narciso Monturiol* (S-82), tanks are being loaded in each of the submarine's five sections, and pipes and equipment are being pre-assembled, while at the same time work is being carried out on the manufacture of its non-resistant structures.

Construction of the resistant hull of the *Cosme García* (S-83) has been completed and the ship's 'steel work has begun, i.e. the fabrication of tanks, rollers (for transporting material and sleepers) and supports for their assembly. Meanwhile, the *Mateo García de los Reyes* (S-84), is starting to grow with the construction of the frames of its resistant hull.

If work proceeds according to schedule, the plan is to deliver the S-82 to the Navy in June 2024, the S-83 in April 2026 and the S-84 in August 2027.



Before embarking, the 48 Navy crew members assigned to the submarine undergo intensive training on Tactical and Platform simulators.

INFRASTRUCTURES

“The entry into service of these modern units requires the adaptation of the Submarine Flotilla's base”, explains its commander, Captain Ernesto Zarco. Remodelling work has begun with the building that houses the combat and platform simulators, and will continue with the modernisation of the electrical supply installation for the submarines and the remodelling of the berths, with

the dredging and lengthening of the trenches and the construction of a new quay, since, as Captain Zarco points out, “the S-80s move approximately 1,000 tonnes more than the S-70s and are ten metres longer”. This will be followed by the construction of a new building for crew members and the remodelling of the general services building and the Submarine School.

ENTREPRENEURIAL SPIRIT

Of the 39 submarines that have served and continue to serve in the Navy, 27 have been built at Navantia's shipyard in Cartagena. Not all of them were designed and built entirely by the Spanish shipbuilding company. Only the legendary D-40 class 85 years ago and now the S-80. Also the first torpedo submarine in history, the *Isaac Peral*, built in 1888 and with an ephemeral life, barely two years, but that was the driving force behind the creation of the Spanish Submarine Force five years later, in 1915.

In his speech during the ceremony for the launch of the S-81, the president of Navantia, Ricardo Domínguez, recalled the validity of the words spoken by the famous inventor, a reflection of his entrepreneurial spirit: “My hopes stem from my conviction based on scientific reasons. The future lies in technological innovation”.

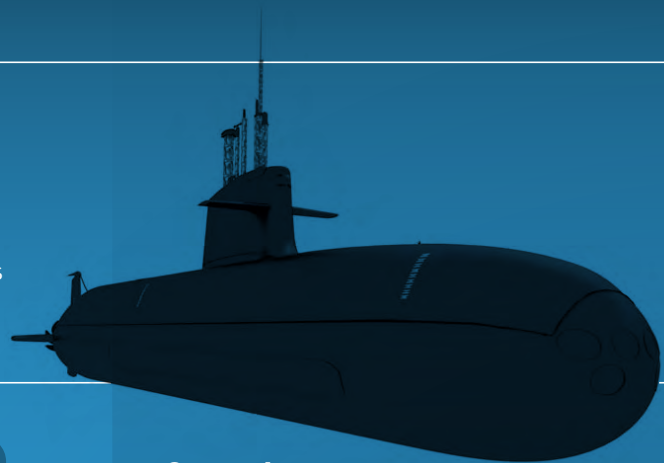
J.L. Expósito



The next step will be the installation of masts (communications, electronic warfare, radar and snorkel) and periscopes on the submarine's sail.

S-80 PROGRAMME

With the S-80, Spain has joined the small club of countries with the capability to design and build conventional submarines. In addition to equipping the Navy with the latest generation submarines, the programme represents a commitment to the technological development of national industry with a clear international projection.

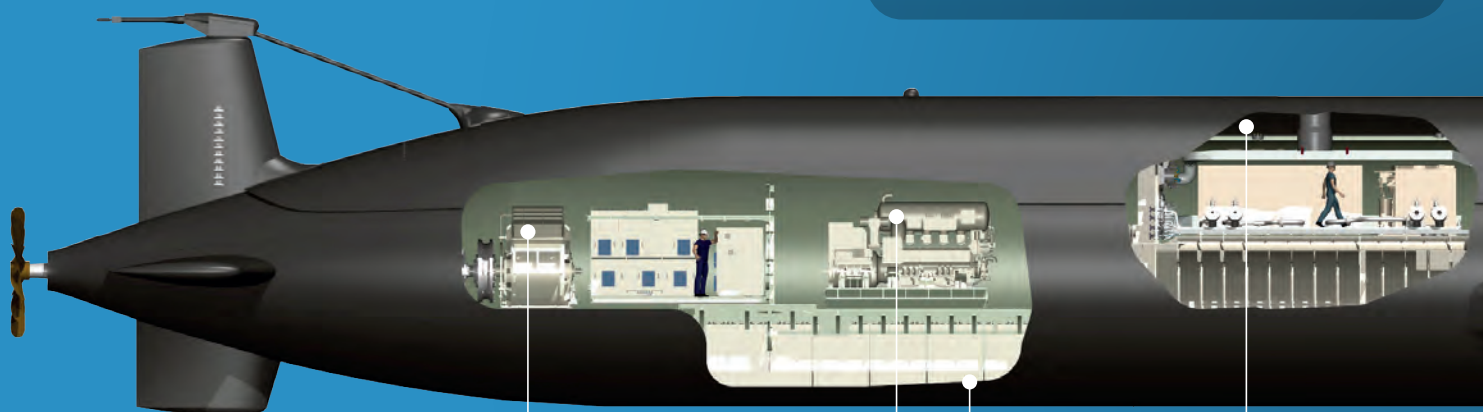


Technical characteristics

• Draught	6.3 metres
• Resistant hull diameter	7,3 metres
• Surface displacement	695 tonnes
• Submerged displacement	2.965 tonnes
• Surface speed	10 knots
• Submerged speed	19 knots
• Autonomy	50 days
• ASubmerged autonomy with APS	Up to three weeks

• Commitment to national industry

To date, the programme has generated 20 million working hours in production and 6.6 million in engineering, and has placed Navantia at the forefront of the international conventional submarine market, involving around 100 large, small and medium-sized companies from eleven regional communities, providing more than 6,000 direct, indirect and induced jobs.



Power plant



ELECTRIC ENGINE

3,500 kW main engine with two independent semi-engines.



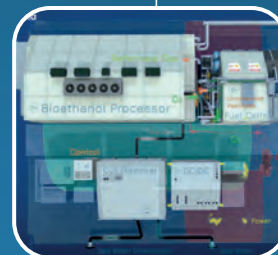
DIESEL ENGINE

Three 1,200 KW diesel generators produce the energy to power the main engine.



BATTERIES

Two battery compartments consisting of 180 cells each, forward and aft.



AIP SECTION

AIP BEST, an air-independent propulsion system that regenerates air and recharges batteries without snorkelling.



Command and control

Concentrates the communications systems, platform control systems and the integrated core of the combat system.



Armament

- TDM2A4 heavy torpedoes.
- Sub-Harpoon Block II anti-surface missiles.
- MINEA mines.
- Countermeasures capability.



Habitability

Goodbye to the 'hot bed'. Each crew member and additional personnel is provided with individual beds and lockers.



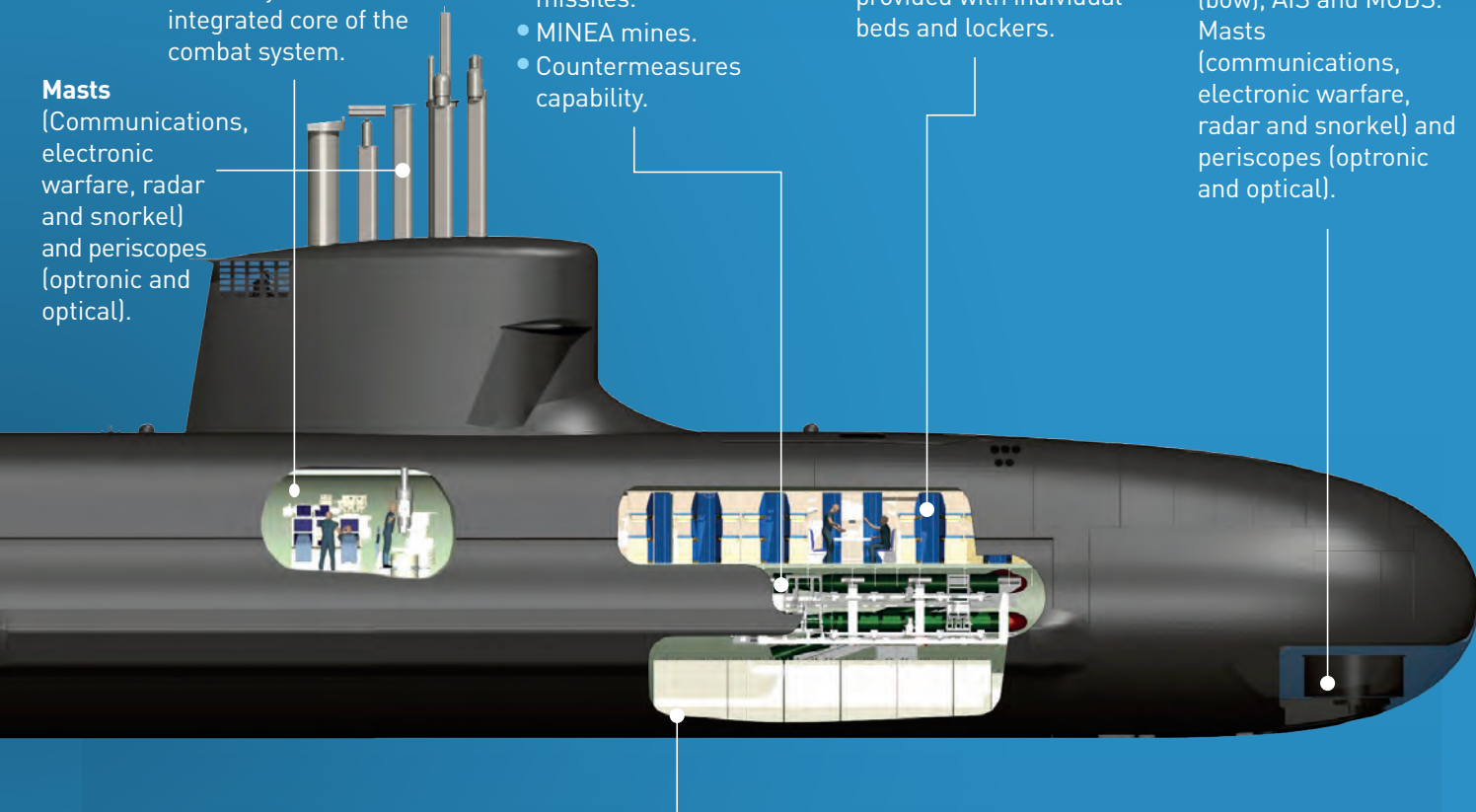
Detection systems

Passive sonar based on TAS (aft), FAS and PRS (beam), CAS (bow), AIS and MODS. Masts

(communications, electronic warfare, radar and snorkel) and periscopes (optronic and optical).

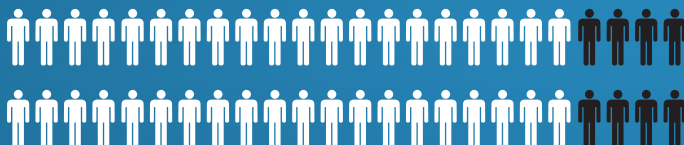
Masts

(Communications, electronic warfare, radar and snorkel) and periscopes (optronic and optical).



Crew

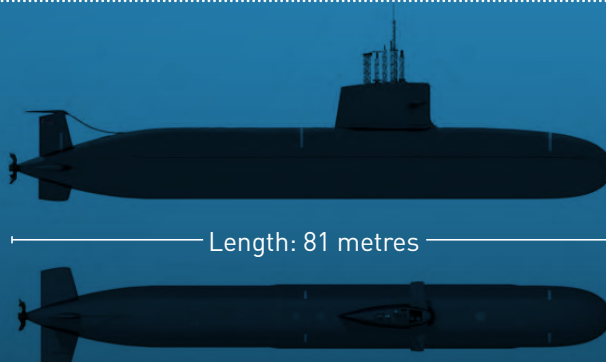
40 crew members



Additional personnel:
up to 8 members of
special operation units

Deliveries to the Navy

- *Isaac Peral (S-81)*: first quarter of 2023.
- *Narciso Monturiol (S-82)*: June 2024.
- *Cosme García (S-83)*: April 2026.
- *Mateo García de los Reyes (S-84)*: August 2027.



Length: 81 metres



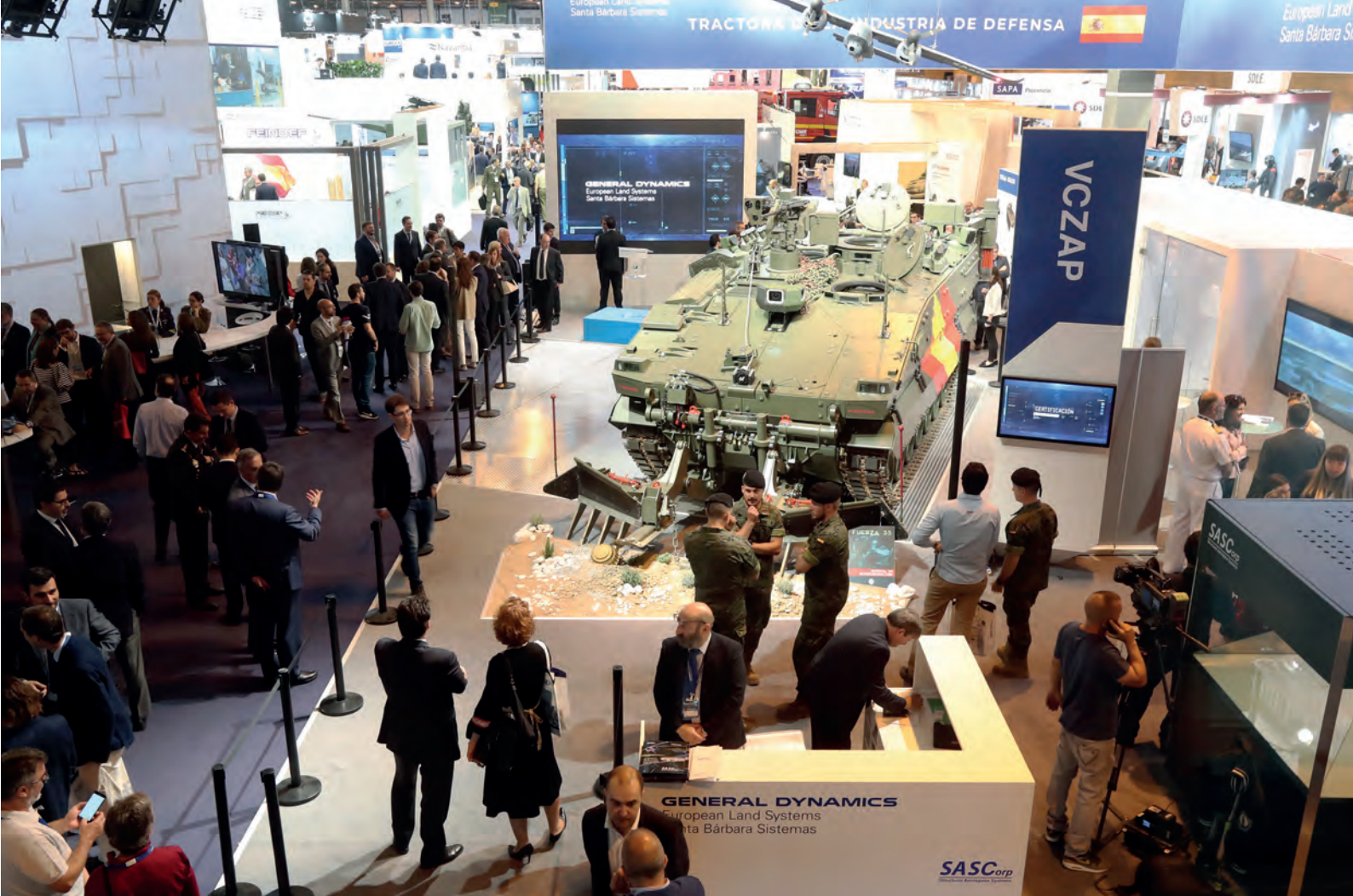
Beam:
11.68 metres

The second edition of the major Spanish defence and security exhibition, to be held in Madrid from 3 to 5 November, has been presented

FEINDEF takes off



The Secretary of State for Defence, Esperanza Casteleiro, closed the presentation of FEINDEF 21, which was also attended by the president of the organising foundation, Julián García Vargas, and the president of Navantia, Ricardo Domínguez.



The first edition of the exhibition, held in spring 2019, brought some 13,000 visitors to Madrid.

F EINDEF 21, the second edition of Spain's International Defence and Security Exhibition, has got off to a strong start. It was officially presented on 9 April, at a ceremony attended by the Secretary of State for Defence (SEDEF), Esperanza Casteleiro; the president of the FEINDEF Foundation, Julián García Vargas; and the president of the public company Navantia, Ricardo Domínguez García-Baquero. The fair, organised by the Foundation with the support of the Ministry of Defence, will be held on 3, 4 and 5 November in Halls 8 and 10 of the Madrid's international trade fair centre (IFEMA).

FEINDEF is conceived as a meeting place where Spanish and foreign defence and security companies can share knowledge with public and private institutions, showcase their scientific and technological capabilities and offer innovative developments that are often dual, with characteristics and properties that make them attractive for civilian use.

Health conditions permitting, the organisers expect more than 20,000 professionals to visit the fair, which will be held in 31,000 square metres of exhibition space designed for the exchange of information and advice on industry needs and solutions. Some 60 foreign delegations are expected to attend and more than 300 exhibition stands are anticipated.

These figures exceed those achieved in the first edition, which was held at IFEMA from 29-31 May 2019. FEINDEF 19 brought together some 13,000 trade visitors in an area

*20,000
professionals
and 60 foreign
delegations
are expected to
attend*

of 14,000 square metres, with 156 exhibition stands from twelve nations. This included stands provided by the Ministries of Defence and the Interior, the Army, Navy and Air Force, other bodies belonging or attached to the Department of Defence, public institutions, main sector companies —both Spanish and foreign—, numerous SMEs and the commercial offices of several nations. There were forums and conferences, product presentations, agreement signings and an extensive display of Spanish technology, on show for the 46 official delegations from 32 countries and four agencies.

Bilateral and multilateral meetings and encounters will be held at FEINDEF 21 between General State Administration bodies and international governmental administrations. High-level events will also take place with the signing of international agreements and contracts, the launch of strategies and plans of interest to the industry, etc.

In order to address the pandemic caused by the coronavirus, the next edition will be held in a COVID-secure

> **ESPERANZA CASTELEIRO, SEDEF**

Significance

THE results of the previous edition were particularly interesting and show us the significance of what we are going to do in November", said Esperanza Casteleiro, who thanked the FEINDEF Foundation for its efforts to ensure that the event takes place in a COVID-secure environment.

The SEDEF stressed that the defence industry is one of the driving forces of our economy, "not only because defence and security are shared tasks that affect society as a whole, but also because of the sector's own figures".

In this regard, the Secretary of State explained that the industry has an annual turnover of 6 billion euros, 80 percent of which is due to exports; and generates 295,000 jobs, including 22,500 direct jobs and 30,000 indirect or induced jobs.

Casteleiro recalled that our defence industrial sector, in the worst moments of the pandemic, switched its production lines to manufacture medical equipment and put its logistical capabilities at the service of the common good, "which represents its commitment to society".

"The defence industry is one of the driving forces of our economy; it has an annual turnover of 6 billion euros and generates 295,000 jobs"



environment, as a comprehensive and pioneering Technological Plan in the field of professional trade fairs will be in place: *Business Safe Event* (BSafe), an artificial intelligence system adapted to current health regulations.

This plan, implemented by the Metalia Group, includes calculating capacity in real time and checking the correct use of masks and the temperature of those present in the two exhibition halls.

The system also makes it possible to reinforce the security of the movements of international delegations and VIPs by keeping track of their transport in the official vehicles provided by the organisation outdoors and by monitoring the work plan and visits to the halls indoors.

In addition, FEINDEF 21 offers its exhibitors a more comprehensive security plan than is standard at trade fairs in

the sector, establishing the traceability of critical assets and strengthening the surveillance and care of sensitive material regardless of size.

OPPORTUNITY

"FEINDEF 21 will be the showcase for defence in Spain", said the Secretary of State for Defence. Esperanza

Casteleiro stressed that the exhibition "gives us an opportunity, after all that we have been through this year, and we have to take advantage of it", and hoped that it "will favour industry, defence and security" in our country.

The president of the organising foundation, Julián García Vargas, considered that FEINDEF 21 would highlight that "in Spain we are working ahead of future needs, placing special emphasis on research and innovation and on forming consortiums that will allow us to compete more successfully worldwide".

"We are going to showcase many of our capabilities and services at the fair", announced Ricardo Domínguez García-Baquero, in his first public speech as president of Navantia, following his appointment on 6 April. He explained that Navantia will exhibit its latest innovations at the Madrid's international trade fair centre (IFEMA), foster



At FEINDEF 19 the Army, Navy and Air Force reported on their missions and presented their main capabilities.

A technological plan will be implemented that will provide a high standard of health safety

contacts at international and national level, and strengthen links with collaborating companies in the sector.

Due to the circumstances arising from the health situation, the official exhibition presentation was held in a blended format: in-person —at the Rafael del Pino Auditorium— and by live video conference.

The event was attended by the Chief of Defence and the Chiefs of Staff of the Army, Navy and Air Force; other senior officials from the Ministry and other government departments; and executives from defence and security companies. Video statements by representatives of the sponsors were shown at the event: Navantia, as main sponsor; Escribano M&E, General Dynamics European Land Systems-Santa Bárbara, Héroux Devtek, Indra, ITP Aero, Iveco, John Cockerill, Leonardo, SASCorp and Tecnobit.

FEINDEF 21 was also presented on 24 and 25 February in an online webinar with the international business sector, promoted by the FEINDEF Foundation and supported by the Ministries of Defence, Industry and Foreign Affairs, with the collaboration of Defence Engineering Systems (ISDEFE). This event highlighted the fair as a catalyst for defence programmes in Spain and as an opportunity to boost the defence industry, employment, talent, innovation and digital transformation, as well as the development, in the post-COVID era, of the sectoral agendas influencing defence and security in the Strategic Framework of Industrial Spain 2030.

Santiago Fernández del Vado

Photos: Pepe Díaz

> **JULIÁN GARCÍA VARGAS, PRESIDENT OF THE FEINDEF FOUNDATION**

A promise kept

“FEINDEF 21 is a promise kept”, said Julián García Vargas, “now we must make this second and future editions a complete success”.

The president of the FEINDEF Foundation expressed his satisfaction “to lead a private, non-profit institution whose mission is to raise awareness of defence and security issues”. The associations TEDAE (defence, security, aeronautics and space technologies) and AESMIDE (contractors with public administrations) are represented in the Foundation.

García Vargas, former Minister of Defence and former President of TEDAE, explained that the Foundation seeks to disseminate the image of the defence industry as a key sector, which generates quality employment in Spain and carries out important RDI work; to support its internationalisation, with a focus on the European Defence Industrial Development Programme; and to bring the culture of defence closer to society.



“The FEINDEF Foundation promotes defence and security awareness”

> **RICARDO DOMÍNGUEZ, PRESIDENT OF NAVANTIA**

Leading forum

“THE exhibition is an exceptional opportunity to showcase the capabilities of Spanish companies and reinforce their positioning”, said Ricardo Domínguez García-Baquero. The president of Navantia said that, after the first edition, FEINDEF has become a “benchmark forum for innovation, cooperation and knowledge-sharing between companies, institutions, universities and other organisations as a global response to security”.

Ricardo Domínguez pointed out that Navantia is the main generator of economic activity and employment in the regions that benefit from the company's production: Cádiz, Cartagena and Ferrol.

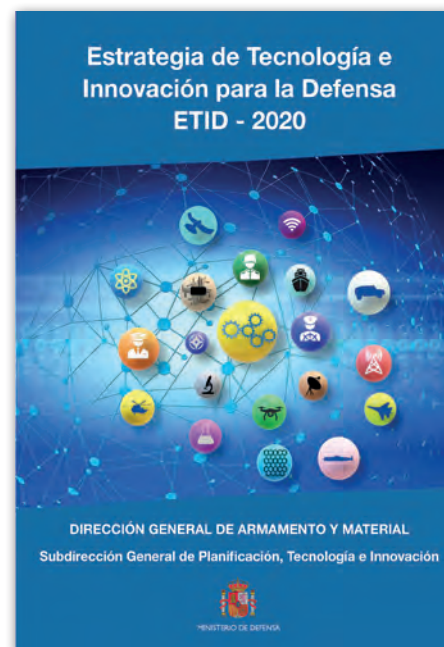
He stressed that the company “is committed to a clear economic, productive, green, digital and fair model with a clear focus on innovation and technological development”, and asserted that the “essential and increasingly technological” shipbuilding industry is set to play an even more important role in the future.



“Navantia is committed to a green, digital model oriented towards technological innovation”

NEW DEFENCE TECHNOLOGY and Innovation Strategy

This document is the framework for RDI agents to develop defence plans and activities



THE Ministry has published a new version of the Defence Technology and Innovation Strategy (ETID 2020), which updates the previous one of 2015, in order to adapt it to today's reality and the foreseeable future of the defence sector in the coming years. This document is the general framework for the development of plans and activities by RDI actors in the defence sector.

The Strategy has been conceived, as explained by the Secretary of State for Defence, Esperanza Casteleiro, in the Letter of Promulgation, "to advance in the basic and primary objective of equipping our Armed Forces with the necessary military capabilities in RDI". "This Strategy is therefore an important and ambitious initiative", points out the Director General for Armament and Materiel (National Armaments Director), Admiral Santiago Ramón González, in the Foreword, "which will benefit the strengthening of national defence and the development of the technological and industrial base, and society in general".

Recently approved by the Secretary of State for Defence, the ETID 2020 can be downloaded for free, in pdf format, from the Defence Publications website (publicaciones.defensa.gob.es).

TRANSFORMATION

This review has taken into account the set of changes that have taken place in recent years at international level, such as the emergence of new threats to security and defence and the exacerbation of existing ones; the consolidation of cooperation initiatives at European level; or the accelerated technological advances that are radically modifying society's way of life, offering opportunities for the development of military capabilities.

The ETID 2020 sets out the Ministry's RDI policy, which serves two purposes. On the one hand, to develop military capabilities through the use of technology to provide operational advantage to the Armed Forces. On the other hand, to support the technology capability development

of the national technological and industrial base, so that it can act as a supplier of the materiel and equipment needed by the Armed Forces on their missions, enabling freedom of action in the use of capabilities.

In order to make progress on these objectives, the Strategy is built on three pillars, which support a series of technological and management actions expected to be carried out over the next six years.

The first pillar –technological objectives– identifies the priorities towards which RDI efforts should be targeted. These objectives are organised on three levels, depending on the size and characteristics of the systems and technologies involved, as well as the kind of actions planned for their achievement, which complement each other.

The highest level provides for the development of technologies to be incorporated into the future major platforms and weapons systems used by the Armed Forces on their missions in the land, naval, air and space domains. As these systems are designed to be in service for decades, it is necessary to undertake technological programmes several years in advance, focusing on incorporating the latest technologies into the most critical functions of the system through technology



Pod for electronic reconnaissance missions for Air Force F-18 fighters.

demonstrators, which enable the readiness of these developments and the risk of transferring them to the final systems to be validated. This includes both projects in which Spain participates within the framework of international cooperation programmes and those developed at national level that can be applied to these future large platforms or weapons systems.

The intermediate level includes technological objectives aimed at addressing the challenges present in the most complex scenarios in which the Armed Forces have to operate, while drawing on the current technological progress to develop advanced and innovative defence solutions. The systems and subsystems targeted by these objectives are much broader than in the previous level, although in general they are smaller in scale than those addressed in the major programmes. However, in many cases, the developments achieved with these objectives can enable the defence technological and industrial base to take part in initiatives of greater scope, both national and international, even in large driving-force programmes, with a contribution in line with the technological level expected from Spain.

Finally, at the lower level, the aim is to monitor progress in a set of emerging technologies with low technology readiness levels whose future development could open up new opportunities for defence RDI or have significant implications and even give rise to disruptive effects. As these are at very low levels of readiness, still in the field of basic research, no specific investments are planned a priori, except in some specific cases. However, the Ministry of Defence expects to act as a link between the national research community and the opportunities that may arise in the international defence organisations in which Spain participates, as well as to provide support and guidance to understand their potential application to defence.

COOPERATION AND IMPROVEMENT

The second pillar of the ETID focuses on national and international technological cooperation as a key element to carry out the RDI activities required for the achievement of the technological objectives.



Explosive ordnance disposal robot used by the Armed Forces to locate, identify and handle suspicious devices.

In the national context, the plan is to continue enhancing coordination with the other public bodies responsible for promoting both state and regional scientific and technical research and innovation to seek the necessary synergies that may favour increasing levels of funding for dual-use technologies. The fact that the ETID is a sectoral strategy for defence within the Spanish Science, Technology and Innovation Strategy (EECTI 2021-2027), assuming its principles and approaches, facilitates the rapprochement between public investments in dual RDI and defence needs.

At international level, the Strategy focuses its efforts on seizing new opportunities for the European defence sector, within the European Defence Fund (EDF), which will be

one of the main channels to develop the capabilities of the national technological fabric over the next decade through RDI activities.

Furthermore, the idea is to continue promoting the participation of Spanish entities in other traditional forums dedicated to international defence research cooperation, such as the European Defence Agency (EDA) and NATO's Science and Technology Organization (STO); and in agreements with other countries for the development of specific projects, similar to what is being done in the NGWS (Next Generation Weapon System) programme.

The Ministry's central role in the development of defence application technologies gives meaning to the third pillar – continuous improvement –, which promotes excellence in the Department through the improvement of its processes, information flows and instruments associated with RDI, so that they can act as catalysts for the technological development of the defence sector.

These pillars are consistent with the guidelines included in the National Defence Directive and the Defence Policy Directive, both approved in 2020, and aim to contribute to achieving the objectives established in these documents.

Santiago Fernández del Vado

*The ETID 2020
sets forth the
technological and
management actions
expected to be carried
out up to 2027*



President of the European Council Charles Michel at the EU-G5 Sahel summit on 16 February. Below, a refugee girl in a hospital in Niger and Spanish EUTM-Mali soldiers training with the Malian army.



Marcel Mettelis/EEF



EMAD

SECURITY and DEVELOPMENT

The European Union designs new Southern Neighbourhood policies and reaffirms its commitment to security and stability in the Sahel

EUROPE wants to keep its eye on Africa and the troubled Sahel region in particular whose inhabitants are victims of instability, hunger and fear. Nothing is simple in a land with vast, inscrutable deserts, porous borders, weak governments, the scourges of climate change and a very young population with hardly any resources that is tired of having no future, making it a breeding ground for jihadist and organised crime predators. COVID-19 has made things even more complicated. According to data from the report issued in February 2021 by The Armed Conflict and Event Data Project (ACLED), around 6,250 people died violently in the Sahel in 2020 (almost 30% more than the previous year) and the yearbook of the International Observatory for the Study of Terrorism (OIET) states that the inhabitants of the central Sahel — Mali, Burkina Faso, Niger, Nigeria, Chad and Cameroon — suffered almost 40% of the attacks recorded worldwide in 2020. In a single day, 17 March, in the *Three Borders* area (the area shared by Mali, Niger and Burkina Faso and undoubtedly one of the most

dangerous places on the planet), a jihadist cell killed 58 people in western Niger returning from a market, including six children; and at almost the same time, 33 Malian soldiers were killed in an ambush by radicals in southern Mali. “The increase in armed violence in the central Sahel region is having a devastating impact on child survival, education, protection and development. Insecurity is growing every day and there are more than 100,000 displaced people in the area alone”, UNICEF Regional Director Marie-Pierre Poirier said in the aftermath of the attacks.

The EU is well aware of this and has for years maintained an ambitious,

*At the G5
Sahel summit,
the EU confirmed
its partnership
against
jihadism*

complex and multi-faceted strategy with a comprehensive approach that invests heavily in development, governance and security. Much has been achieved, but the reality is that much remains to be done. In recent weeks, the main bodies of the European Union have been busy with meetings and decisions in the firm conviction that establishing a belt of stability in the heart of Africa is key to the lives of Africans, the security of the entire continent and peace for each and every one of us. In early February, the European Commission and Parliament and EU High Representative for Foreign Affairs and Security Policy Josep Borrell presented an ambitious new Agenda for the Mediterranean. Later that month, on 26-27 February, the European Council meeting at a head of state and governmental level devoted one of its sessions to corroborating the need for increased ambition in the political and strategic partnership with the South. “A renewed and strengthened partnership with the countries of the Southern Neighbourhood is in our collective, political and strategic interest”, said Charles Michel, President of the European Council after the meeting.



Markus Heine/EFE

Malian children in a refugee camp of the UN Multidimensional Integrated Stabilisation Mission in Mali (MINUSMA).

Michel explained that the 27 had identified a number of key priorities to centre on that should be the focus of Europe's various policies towards its southern partners: "Strengthening the resilience of our societies and economies, safeguarding our collective security, addressing the challenge of mobility and migration and offering prospects for young people on both sides of the Mediterranean should be underpinned by an enhanced and intensified political dialogue."

SHARED SECURITY

Two weeks earlier (15-16 February), the 7th EU summit with the heads of state and government of the *G5 Sahel* countries (Burkina Faso, Mali, Chad, Niger and Mauritania) took place. The meeting was headquartered in N'Djamena (Chad) and held by video conference, and the European countries confirmed their intention to continue their collaboration with the countries of the area to help them become capable of confronting the jihadist scourge. At a press conference, French President Emmanuel Macron also argued in favour of increasing the contingent of the European Takuba task force, which was created in 2020. It includes French, Estonian, Czech and Swedish troops and "should increase from the current 400 soldiers to 2,000".

During the summit, European and African leaders also reaffirmed the

Joint Declaration signed in April 2020 by European Council President Charles Michel and *G5 Sahel* President Mohammed Ould Ghazouani, in which the 27 EU members and the five Sahelians committed themselves to prosperity and security in the region by focusing on four main areas: fighting terrorism; enhancing the security and defence capabilities of the *G5 Sahel* countries; restoring state presence and basic services in unstable areas throughout the territory; and intensifying development efforts.

The 2021 meeting followed on from the Pau Summit (France) held a year ago, and the extraordinary summit in Nouakchott (Mauritania) on 30 June 2020, in which Spanish Prime Minister Pedro Sánchez participated in person. The Pau Summit, hosted by President Macron, announced the creation of the Coalition for the Sahel,

The Sahel Alliance agreed to invest 23 billion euros in more than 800 projects

whose main objective is to coordinate an international collective response to the challenges in the region and in support of the *G5* member countries.

An international consultation of the Coalition for the Sahel took place on 16 March with the intention of analysing the current situation in the area. Convened by French Defence Minister Florence Parly, it was attended by ministers and authorities from most European countries, the members of the *G5 Sahel*, and the United States, Josep Borrell, High Representative of the Union for Foreign Affairs and Security Policy, and Jean-Pierre Lacroix, UN Under-Secretary-General for Peace Operations. On the Spanish side, Admiral Juan Francisco Martínez Núñez, Secretary General for Defence Policy, stressed Spain's firm commitment to peace and stability in the Sahel "as shown by the capabilities we have placed at the disposal of the European Union's training mission, EUTM-Mali, and its assumption of leadership," and he highlighted the promotion of African women as agents of peace.

Following on from the idea that development and security go hand in hand, the second General Assembly of the Sahel Alliance (chaired by Spain since 2020) was held on the same dates as the summit between Europe and the *G5*, and also in the Chadian capital. At the General Assembly, it was agreed to increase investment in more than 800 projects in areas such as education, employment, energy and climate to 23 billion euros. Arancha González Laya, Spanish Minister of Foreign Affairs, EU and Cooperation, explained that the Sahel Alliance is "the main platform for dialogue, coordination and international cooperation in the region in a context marked by instability and violence".

In this context, the Spanish minister highlighted not only the projects and resources that have been mobilised, but also the fact that the Sahel Alliance "sets specific objectives around which security, political and social actions must be coordinated". González Laya explained that a year ago, during the first assembly held in the Mauritanian capital, mapping was performed in fragile areas with four priority objectives: "The return of the state to these areas, an agenda for

International involvement in the Sahel

IN recent years, the European Union—and other international security organisations such as the United Nations and the African Union—have demonstrated their commitment to the Sahel and hard-hit Mali in particular, with the conviction that there can be no peace without prosperity and no development without security. Defence Minister Margarita Robles explained to the Parliament on 10 March that “international presence, to which Spain is unequivocally committed, is essential to prevent the deterioration of security; it is also essential to lay the foundations for a future of progress and stability”.

For this reason, in addition to aid policies and initiatives such as the Sahel Alliance (created in 2017 by France, Germany and the European Union, in which fourteen countries (including Spain) participate), the European Union's main commitment within the framework of the Common Security and Defence Policy focuses on this afflicted area of Africa. It has four missions deployed there: two military training missions (EUTM-Mali since 2013 and EUTM-RCA since 2016, the latter in the Central African Republic) and two civilian missions, EUCAP-Sahel Mali (launched in 2014 and whose mission is to assist the internal security forces in the restoration of authority throughout the country); and EUCAP Sahel Niger (since 2012 this mission has been tasked with offering support against organised crime and terrorism in Niger).

Mali is currently the epicentre of instability in the Sahel, which is why a year ago, in March 2020, the European Council decided to expand the scope of EUTM-Mali (which already covers the entire Malian territory) and to extend the mission for a fifth mandate. In addition to continuing with training, advice and education to reinforce the capabilities of the Malian Armed Forces, with the ultimate goal of achieving a secure environment within the country's borders and reducing the threat posed by terrorist groups (the Malian Army has slightly more than 15,000 troops for a country

two and a half times the size of Spain), this EU mission also provides military advice, training and mentoring to both the G5 Sahel Joint Force and the national armed forces of the five countries that are members of this initiative. The Council also extended the mission's mandate until May 2024 and provided it with an increased indicative budget of 133.7 million euros for a four-year period.

Margarita Robles stressed to MPs that, in addition to all these tasks, EUTM-Mali “also carries out collaboration and support activities for the civilian population, which contribute to the development and stability of the region” and that “it is also responsible for promoting the important role of women in society, which is helped by the presence

increase to 530 as the political situation in the country permits. In addition, Spain will contribute new capabilities—an A-400M aircraft, which would operate from Spain on demand, and helicopters—to the mission.

The Spanish Defence Minister stressed in her appearance before Congress that “achieving an end situation of stability depends on the solidarity commitment of the international community (especially the European Union) and the will and dialogue of the authorities to move towards a political solution that will allow the country to return to constitutional order.” She confirmed that “Spain is fully committed to this effort and to the continuity of the mission and its return to full operation as soon as possible”.

Alongside EU missions, the UN maintains two peace operations in the area: MINUSMA in Mali and MINUSCA in the Central African Republic. NATO advises and trains the African Union with the African Standby Force. Five countries—Benin, Cameroon, Niger, Chad and Nigeria—have also created the Multinational Joint Task Force (MJTF) under the framework of the AU, and this specific unit helps to fight terrorist group Boko Haram.

Since 2018, the G5 Sahel initiative has also enabled the five member countries (Mauritania, Mali, Niger, Chad and Burkina Faso) to create a Joint Force to join forces in the battle against jihadism and organised crime. Comprising 5,000 troops in seven battalions, it has the authority to operate 50 kilometres on either side of member states' borders to facilitate pursuit and support. Spain is one of the countries that contributes to its funding.

Shortly after the uprising that segregated northern Mali, France deployed Operation Serval in 2012 (*Barkhane* since 2014), to assist the country's legitimate government in the fight against Islamist terrorism (the Spanish Air Force's *Marfil* detachment deployed in Dakar, Senegal, supports this mission and MINUSMA in airlift missions).

France also leads the Takuba task force, which includes units from Estonia, the Czech Republic and Sweden to “accompany, assist and advise local forces”.



EUTM-Mali extended its mandate in 2020 to provide advice and training to the G5 Sahel countries.

of women in military contingents, which facilitates communication with the local female population and makes them an additional agent in the consolidation of stability”.

EUTM-Mali has its headquarters in Bamako and the bulk of its contingent in Koulikoro. It consists of around 700 soldiers from 25 countries (22 European countries, plus Georgia, Moldova and Montenegro), although the total number of troops is expected to reach 1,066 later this year. Spanish General Fernando Luis Gracia Herreiz has been head of the mission during the first half of 2021. Spain is also the largest contributor with just over 300 troops; and as approved by the Council of Ministers in December, this number will

women and youth, climate change and food security". A month later —on 8 March— and with Mali also playing a main role, the second meeting of the Transition Support Group in Mali took place. It consisted of the Malian government and the governments of other neighbouring countries, the African Union, the United Nations, the European Union and the five member countries of the UN Security Council. The Group was formed last November —after the August 2020 coup d'état— to accompany and support the new Malian government in the transition process for the consolidation of democracy and the renewal of political institutions. At the meeting, Malian Prime Minister Ibrahim Boubakar Keita presented his government programme to the National Transitional Council, which will determine the road map until the elections scheduled for March 2022.



The G5 Sahel Joint Force, created in 2018 by Mauritania, Mali, Niger, Chad and Burkina Faso, enables joint efforts in the fight against jihadism and organised crime.

The action plan has six main axes: strengthening security throughout the country; promoting good governance; overhauling the education system; political and institutional reforms; adoption of a social stability pact; and organisation of general elections. The Group also analysed the

implementation process of the Peace and Reconciliation Agreement for northern Mali signed in Algiers in 2015 between Bamako and the rebels of the National Movement for the Liberation of Azawad. Once again, the data demonstrated the complexity of a process in which violence and

Mali's unfinished drama

MALI has been plagued by instability and senseless jihadism in the Sahel for almost a decade. The data are very clear: according to the 2020 yearbook of the International Observatory for the Study of Terrorism, countries such as Nigeria, Burkina Faso, Mali, Niger, Cameroon and Mozambique are already among the world's leading countries in terms of Islamist terrorist activity (second only to Afghanistan). The yearbook also picks out another interesting feature of jihadism spreading in Africa, noting that "the various conflicts that already exist in these countries are being exploited by foreign terrorists to enter these countries, recruit new followers and establish new operational and logistic bases in their territories". In the case of Mali, in January 2012 a series of factors came together in a perfect storm that caused the country to explode. The northern Tuareg independence fighters of the National Movement for the Liberation of Azawad (MNLA), strengthened by soldiers and arms from Libya, were joined by three terrorist groups that had built a sanctuary in the Malian desert where they captured and radicalised its population with a false social and protection policy. These terrorist groups were *Al Qaeda jihadists in the Islamic Maghreb* who had been expelled from Algeria; *Ansar Dine*; and the *Movement for the Unity of Jihad in West Africa* (Mujahed). In just a few months, Islamist radicals hijacked the Tuareg revolt and seized power over the entire Azawad region (Kidal, Timbuktu and Gao), cruelly imposing Sharia law. This resulted in hundreds of thousands of refugees and internally displaced persons and thousands of deaths (UN figures put the death toll at just over 15,000 by 2020). Operating

from their stronghold in the north of the country, in June 2012 they launched a coordinated offensive against Bamako to take control of the entire territory. International intervention managed to put a stop to it and, little by little, recover areas in the north, but jihadist cells still have areas under their control, and use desert safe havens in combination with techniques for hiding among the civilian population. Their power has not decreased, and it could even be said to have increased.

After the military defeat of *Daesh* in Iraq and Syria and the eradication of the caliphate's territory in these areas, the heart of Africa has become, according to Colonel Jesús Díez Alcalde in a report by the Department of Homeland Security, "the most worrying epicentre and focus of global Islamist extremism which, far from lessening its tyranny over the population and its growing territorial dominance, is undermining peace, governance and progress for millions of Africans". Who the Sahel jihadists are today isn't easy to define. Different groups are intertwined and allegiances to the two sides to Islamist terrorism —*Al Qaeda* and *Daesh*— vary by country or even by area. Broadly speaking, it is possible to outline significant dates or movements: 2017 saw an alliance of the different groups loyal to *Al Qaeda* to fight together against the Malian security forces and the international missions deployed in the area. They created the *Support Front for Islam and Muslims* (JNIM), which groups together the Salafist *Ansar Dine* militias (its founder, Tuareg Iyag Ag Ghaly, is the leader of JNIM), the *Macina Liberation Front* (led by Fulani preacher Amadou Koufa) and *Al Murabatin* (under the

The UN puts the number of violent deaths in the country over the last decade at more than 15,000

attacks are increasing every day. Cristina Gallach, Secretary of State for Foreign Affairs and for Ibero-America and the Caribbean, emphasised that Spain's presence at this meeting "meets coherence criteria, because our country considers Mali to be a strategic priority partner with shared interests in security and stability".

HOPES FOR THE FUTURE

On 9 February, the European Commission and High Representative Josep Borrell adopted a joint communication proposing a new Agenda for the Mediterranean that brings together all the tools at the EU's disposal and strengthens the unity and determination of the European Union, its member states and southern neighbours in promoting stability and well-being in the Mediterranean region. It focuses on five policy areas: human development, good governance and the rule of

The EU has designed an ambitious and innovative new Agenda for the Mediterranean

law; resilience, prosperity and digital transition; migration and mobility; green transition that protects the region's natural resources and generates green growth; and peace and security to provide support to countries to address security challenges and find solutions to ongoing conflicts. "25 years after the Barcelona Declaration and ten years after the *Arab Spring*", Borrell told a press conference, "challenges in the

Mediterranean - many of which resulting from global trends - remain daunting. To address these challenges, we need to renew our mutual efforts and act closely together as partners, in the interest of all of us. This is what this new Agenda is all about. We are determined to work with our Southern Partners on a new Agenda that will focus on people, especially women and youth, and help them meet their hopes for the future, enjoy their rights and build a peaceful, secure, more democratic, greener, prosperous and inclusive Southern Neighbourhood". The new Agenda includes a dedicated Economic and Investment Plan to spur the long-term socio-economic recovery. Up to 7 billion euros for the period 2021-2027 would be allocated to its implementation, which could mobilise up to 30 billion euros in private and public investment in the region in the next decade.

Rosa Ruiz

command of Mojtar Belmojtar, known as *Mr Marlboro* or the one-eyed). In February 2020, Malian President Ibrahim Boubakar Keita announced his intention to negotiate a peace agreement with JNMI, but so far there has been nothing concrete.

In 2015, the first official *Daesh* franchise burst into the Sahel: the self-proclaimed *Islamic State in the Greater Sahara* (EIGS). Its main headquarters are in Niger but it has a strong presence in Mali and the capacity to act in various countries in the area. It initially vied for control with *Al Qaeda* loyalists but the two groups later signed a non-aggression pact that even led them to collaborate in 2019.

Everything changed in 2020 when both jihadist factions engaged in internecine warfare, exploiting rivalries between local communities over scarce livestock and agricultural resources. As UN Secretary-General Antonio Guterres noted in a worrying report on the Sahel last July, both JNMI and EIGS have used COVID-19 to increase their manipulation of the population, claiming that the virus is a "divine punishment of Westerners and blaming their governments for the damage caused by the pandemic as an excuse to intensify their attacks."



Jihadists in November 2020 at a site in the Liptako-Gourma region, which is shared by Mali, Burkina Faso and Niger.

A recent Crisis Group report claims that Sahel jihadists are now stronger, better organised and have increased their territorial control from Mali to the Liptako-Gourma region (shared by Mali, Burkina Faso and Niger). They are also beginning to carry out attacks in other countries in the Gulf of Guinea (Ivory Coast and Benin) and are threatening to join forces with *Boko Haram* jihadists in Nigeria and the self-styled *Islamic State in West Africa Province* (ISWAP), which is active in the Lake Chad region. In 2016, the

Ansarul Islam group also emerged in northern Burkina Faso (initially led by Malam Dicko, after his death it is now believed to be led by his brother Jafar Dicko), which is also suspected of collaborating with its Malian co-religionists.

With regard to the political situation after last August's coup d'état, a certain hopefulness can now be found amid the ever-present complexities in Mali. Under pressure from the international community and especially from Europe, the Malian prime minister has already presented his government programme to the National Transitional Council with a reform plan that will culminate in general elections next year and a reshaping of the state system. But for now, peace remains a pipe dream.

The Atlantic Alliance is a pioneer in gender equality and one of the main driving forces behind the Women, Peace and Security Agenda

GENDER, NATO PRIORITY

LTC. Álvaro Martínez-Villalobos

Deputy Chair of NATO's Executive Committee on Gender Perspectives

THE way in which gender issues are understood and addressed within the military, and NATO in particular, remain largely unknown. Stating that the Alliance has been and continues to be not just a benchmark, but the benchmark for the military in terms of gender issues isn't always easily comprehended or accepted, depending on who you're talking to, but it is indisputable. NATO has never been oblivious to the values of the member societies that represent it. It is, in essence and by definition, the defender of these values.

Incorporating gender issues into NATO was the logical consequence of the various social changes that began to take centre stage with regard to women after the Second World War. As the logical empowerment of women in Western societies took shape and began to take hold, NATO —made up of these same nations— also began to shape this empowerment and it continues to do so today through an ongoing effort to integrate a gender perspective in all areas of its work.

As early as 1954, NATO (during the Annual Military Service Review Committee) had already discussed or debated women's roles. Officially, the first Conference of Senior Service Women Officers of the Alliance was held in Copenhagen in 1961 and the Director's Conference of Senior Women Officers was convened in 1966, attended by representatives from seven NATO countries. In November 1973, a specific Committee on Women in the NATO Forces (CWINF) was established; the delegates already represented around 100,000 military women and adopted a

resolution agreeing that women should have the opportunity to serve in all jobs, with the exception of those involving combat (which was then considered a political and national competence). The Women's Committee was formally recognised by the Military Committee in July 1976.

Spain participated at the CWINF conference (attended by representatives from thirteen countries) for the first time in 1985. This was also the moment when the creation of a full-time gender post in the International Military Staff (IMS) was proposed and requested. This post —at the highest strategic military level— was finally created in January 1988 (the Royal Decree that first allowed women access to 24 military corps and ranks in the Spanish Armed Forces was passed in February 1988). The CWINF was the direct predecessor of the current NATO Committee on Gender Perspectives (NCGP), and I was honoured to be elected as Deputy Chair of the Executive Committee (EC) last October, at the proposal of Spain, until 2022.

At that time, work consisted of making progress in the integration of women and adapting organisations and structures, and equality was already being openly discussed. The question was how to integrate women into the Armed Forces, not the outdated debate of whether or not they should be integrated. While this aspect remains important at NATO, today the focus is on gender mainstreaming in allied military operations. The essential aim is an in-depth understanding of the role that women (without excluding men) have or play in societies or specific social environments where the Atlantic Alliance operates or will operate to gain a military advantage



Pepa Díaz

from analysing these roles and applying the results of this analysis. No more, no less. In other words, it is a different aim that works in combination with integration and equality.

RESOLUTION 1325

When discussing the various progressive stages of gender issues in the Alliance, it is easiest to simplify as far as possible and refer to before and after UN Resolution 1325 on Women, Peace and Security of October 2000. For the first time, the UN Security Council addressed the disproportionate and specific impact of armed conflict on women and recognised the need for women's participation in conflict prevention and resolution, peacebuilding and peacekeeping. This was so indisputable it was bound to have an immediate effect on NATO. In 2007, the Committee on Women published a report (Committee on Women in the NATO Forces, a guide to gender mainstreaming in NATO), the Alliance's first major contribution to providing a gender perspective to military operations, especially with regard to operational planning, education, training, and evaluation. Shortly afterwards, Directive Bi-SCD 40-1 was approved in September 2009, as part of the practical implementation of policy guidelines. Subsequently updated and revised, it contains very specific aspects relating to gender education and training in NATO military operations, as well as gender mainstreaming in each and every phase of planning, executing and evaluating these operations.

*Gender
mainstreaming
is not a women's
issue, it affects
everyone equally*

In May 2009, the CWINF and the Office on Women were transformed (May 2009) into the NATO Committee on Gender Perspectives (NCGP) and the NATO Office on Gender Perspectives (NOGP) respectively. In 2014, the NCGP Executive Committee officially changed its rules to reflect that it must have at least one member of each gender. I would like to draw attention to this fact, not because I am currently the only male member of this Executive Committee, but because of the change or evolution in people's mentality, bearing in mind that gender mainstreaming is not solely a women's issue but one that affects everyone equally and needs everyone's involvement. It is fair to say that equality discourse at NATO has outdone itself, at least conceptually.

The NCGP became the main advisory and support body to NATO's Military Committee on gender issues and its functions included promoting gender as a strategy that includes both women's and men's concerns and interests. Its role was defined and it became an essential part of drawing up, implementing, monitoring and assessing military policies, programmes and operations. It facilitates the exchange of information between NATO nations within the NATO Command Structure (and specifically within NATO Headquarters in Brussels) on policies related to gender perspectives, collaborates with international organisations and agencies interested in integrating a gender

R E P O R T

perspective into military operations, and is the military's point of contact for collecting and disseminating relevant gender information to NATO nations and partners.

Another key milestone came in 2012 when, during the Chicago Summit and following Norway's offer to fund the position of a woman Representative for Resolution 1325 on Women, Peace and Security, the post of NATO Special Representative for Women, Peace and Security was created. Since January 2018, the position has been held by Clare Hutchinson, a Canadian national who was born and educated in Britain.

A first Report was issued in October 2013 and a working group was also established with representatives from all divisions of the International Staff (IS), the International Military Staff (IMS) and the Strategic Commands (ACO and ACT) to discuss and coordinate general guidelines and ways to improve the practical implementation of the policies driven by Resolution 1325. In June 2014, it was recommended that a Civil Society Advisory Panel (CSAP) on this issue should be established. It was officially created in 2016 and serves as a forum for consultation and ongoing dialogue between civil society in general and NATO (Spain has participated since its inception).

INTEGRATION AND EQUALITY

Focusing on women who have joined the Armed Forces and applying a simple, horizontal statistics gives a figure for the allied nations as a whole that is slightly over 11% (Spain has a higher figure that is closer to 13%). While this does not initially look like much nor appears to be a great achievement, this view changes when the figure is put into perspective. A number of significant factors need to be taken into account. Firstly, the heterogeneity (albeit relative) in the traditional role of women in society depending on the allied nation under consideration. Some countries have been incorporating women into their armed forces since the 1940s, while in others this incorporation is much more recent. It should also be acknowledged that women's priority access to allied armed forces has, in general, been actively promoted or has continued to be actively promoted. Spain, most notably, has made a tremendous effort and has achieved outstanding and even exemplary results in the case of its Armed Forces.

It is also noteworthy that a vertical approach to structures (from the bottom to the top or vice versa) means it is now becoming normal to find women in top positions. For example, in Brussels two of the thirty seats on the Military Committee (the military representatives

of all allied countries) are now occupied by women: a Canadian and a Norwegian lieutenant generals (or equivalent), whose nationality is no coincidence. Nor is it by chance that the previous commander or head of NATO's allied mission in Iraq (one of the three main active missions, along with Kosovo and Afghanistan) was another woman general, this time of Danish nationality. They followed a normal military path or career in military organisations in their respective nations, regardless of whether they were women or not. It would once again be a mistake to examine percentages or figures alone. The idiosyncratic nature of the military profession will mean that, over time, other nations will be represented by women generals and it will no longer be seen as something exceptional. This is already beginning to be the case of the Alliance, as high-ranking women are filling positions in its organisation. Everything will come in time, in a fair balance and without a fuss.

Continuing at NATO HQ in Brussels, a look at the civilian structure at the strategic level reveals that the number of women on the International Staff (IS) is already over 41%. In other words, at a permanent representation level where the Alliance's real political power is concentrated, there is a far greater balance – in terms of numbers or percentages – when there are no longer constraints as regard to a professional military career.

Even so, it is fair to say that much has been achieved. Today, Gender Advisors (GENADs) in NATO operations are a matter of course. And not only in operations: there is a whole structure where the HQ commanders in

Naples or Brunssum, as well as ACO and ACT (and of course the IMS) have specific GENADs as part of their staff. Work is underway to bring allied land, naval and air commands into this network as well. At a less specialised or exclusive level, there is also a fairly well recognised and recognisable network of Gender Focal Points (GFP) or points of contact for gender issues. And, naturally, all allied missions and/or deployments have at least one Gender Focal Point or GENAD.

Under the ACT umbrella there is a specialised and specific NATO Centre of Excellence for Gender in the Military (Nordic Centre for Gender in Military Operations, NCGM) which provides training to GENADs and GFPs, and which is a first-class international and doctrinal benchmark. It is also responsible for approving, validating or certifying gender training that may be provided in any other centre or institution to ensure it meets NATO standards (and is recognised as valid by NATO as a result), and it can even deploy teams to teach courses on an ad hoc basis. At other levels, there are also



Officers from NATO countries at a working session at NATO Headquarters in Brussels.

specific, one-off courses for NATO commanders (key leader trainings), which are important to raise awareness in general and to make commanders understand the correct interpretation, the military advantage that is gained from gender mainstreaming in military operations, and how to make the most of this advantage. Specific training is also coordinated and provided to all personnel who are deployed in any allied operation (which will eventually include partner countries).

Perhaps as a result of the Alliance having been in many ways a pioneer in analysing and undertaking the consideration, integration and participation of women in conflict and peace processes, NATO's leadership with regard to gender is as indisputable as it is remarkable, and its ongoing collaboration in this field with all types of international, governmental and non-governmental organisations is a fact. Its close cooperation with the United Nations, in places such as Afghanistan or Kosovo, is particularly relevant.

MUCH WORK AHEAD

The NATO Committee on Gender Perspectives (NCGP) and its Executive Committee are located at the International Military Staff (IMS). Our efforts are currently focused on two areas. Firstly, we are continuing to work on and define the outlines of a five-year Action Plan to make gender mainstreaming a further capability for the Alliance, and this has been our main project since the 2019 Annual Conference. This would mean being able to achieve an effects-based capability by using an integrated set of aspects categorised as DOTMLPFI (Doctrine, Organisation, Training, Material, Leadership Development, Personnel, Facilities and Interoperability). To achieve this, if the Military Committee finally gets the green light, we are proposing an ambitious Strategic Plan that would need to be developed with the collaboration of ACO, ACT and the IS. The ultimate aim is standardisation and normalisation to optimise concepts, structures and resources to obtain a military advantage. Our potential adversaries fully understand how to exploit the roles, responsibilities and opportunities of men and women within a given cultural context to create the most favourable conditions for achieving their desired outcome. And they do exploit it. Not only that, like a further strategy, they use this capability against Allied societies and their men and women (both military and civilian) creating effects that are very difficult to quantify and assess,



Martínez-Villalobos (right) and other Committee members at an event commemorating the 20th anniversary of Resolution 1325.

but which can undermine the cohesion and values of the societies of NATO member states. The second of our planned lines of action has more to do with our own internal organisation and working methods. Due to our unique features and characteristics, we seek to maximise the involvement and interaction with the Military Committee and other IMS working groups in our field of action.

On the civilian side, the Operations Policy Committee of the International Staff, under the chairmanship of Special Representative Clare Hutchinson, launched a number of initiatives last year, following advice from the Military Committee. Military highlights include approval for the development of the Action Plan for the Prevention and Response to Sexual Abuse and Exploitation, and an action plan that addresses gender-related sexual violence in conflict, which is expected to be approved this year. In these two cases, concepts and guidelines are provided that are then developed by the two strategic commands and translated into concrete, tactically applicable plans and actions. The Office of the Secretary General's Special Representative for Women, Peace and Security is particularly active and in 2020 it achieved the development and approval of, for example, the Inclusive Language Manual for NATO documentation, which is already recommended for use and progressive implementation at the IS (its application to the language of official documents is even under discussion at the IMS).

There are also annual or periodic reports, such as those on inclusion or sexual diversity, collaborations, seminars, congresses and conferences that are open to all types of institutions and civil society in general. Even throughout challenging 2020, NATO continued to put itself forward as a forum for dialogue and exchange of experience with civil society, and where the issue of Women, Peace and Security is openly discussed with all kinds of interlocutors. Finally, the ongoing dialogue with young people—a personal commitment that has been strongly promoted by the

*NATO
encourages
and promotes
women's role in
peacebuilding*

Office of the Secretary General—and NATO's 2030 agenda are proof that the Alliance has retained its essence and the robust pillars that have made it the longest-lived and most effective defence and security organisation in history while being wholeheartedly in line with the same concerns that affect the citizens of its member societies. There is still a long way to go, but the gender topic in NATO is an excellent example of progress. ■

Meeting between allies

Spain and the US share their strategic vision

"SPAIN is an indispensable ally of the United States and will be consulted as the US develops its new global strategy", recognized US Secretary of Defence, Lloyd J. Austin, during a telephone conversation with the Minister of Defence, Margarita Robles, on 14 May. The two leaders highlighted the strong bilateral relationship between the United States and Spain, their shared values of freedom and democracy as well as their shared strategic vision.

Secretary Austin thanked Robles for "the contribution and sacrifice" made by our country in Afghanistan, expressed his condolences for the Spanish lives lost as a result of COVID-19 and applauded the great role played by the Spanish Armed Forces in fighting the pandemic. He also thanked Robles for "the country's contribution and sacrifice" in Afghanistan and highlighted the return of Spain's last forces from Afghanistan on May 13, after almost 20 years in the Asian country. He also praised the minister's remarks "concerning the greatest security challenges our nations are facing as a result of climate change" during President Biden's Leaders' Summit on Climate in April. The Defence Secretary invited Margarita Robles to visit the United States as soon as the conditions of the pandemic improve, in order to be able to travel more freely and speak in person.

Spain, the Minister explained, has welcomed the Biden Administration



Jaime M. González/MDE



US Secretary of Defense

"with positivity and hope", building on Spain-US relations that are already strong in all areas, including defence. "It is particularly appreciated at the shared-use Spanish bases in Rota and Morón", which the Minister invited Secretary Austin to visit together.

Concerning the situation in Iraq, where both countries' service members are part of international coalition and NATO operations, the two leaders recognised the continuing threat posed by Daesh and the need to continue to support Iraqi security forces so that they can effectively lead the fight against terrorism. In addition, the two leaders discussed the security situation along Europe's southern flank.

The Secretary of Defence acknowledged "Spain's important contributions to security in the Mediterranean" and highlighted the potentially destabilizing role that malign Chinese and Russian influence can play in Africa. Both agreed on the tremendous importance of protecting sensitive supply chains, infrastructure and technology.

Defence officials also discussed the issue of the rise of terrorism in the Sahel. Robles pointed out that, due to its geographical position, Spain has "a particularly strong awareness of developments in this region", to which part of the terrorism previously active in the Middle East is moving, so it is essential to reinforce the southern flank within the strategy of NATO and the European Union.

Austin and Robles took pains to stress the strong bilateral defence relationship

Dynamic Manta 21

NATO anti-submarine warfare exercise

Eight NATO nations participated in *Dynamic Manta 21* in the central Mediterranean from 22 February to 5 March. This is one of the major anti-submarine warfare exercises led each year by NATO's Maritime Command and it involved five surface ships, five submarines, five maritime patrol aircraft and the French aircraft carrier *Charles de Gaulle* with its support ships. It also involved surface ships from the Standing NATO Maritime Group 2 (SNMG-2), currently under the command of Spanish Rear Admiral Manuel Aguirre aboard frigate *Cristobal Colon*.

This exercise "remains one of the most challenging exercises and an excellent opportunity for NATO nations' naval forces to practice, evaluate, and refine their anti-submarine skillset in a demanding environment", said Rear Admiral E. Andrew Burcher, Commander Submarines NATO. At *Dynamic Manta*, the submarines took turns 'hunting and being hunted', closely coordinating their efforts with the air and surface participants.



NATO

Exercise Orion

The 11th Brigade Extremadura in Portugal



Ejército de Tierra

THE goal of exercise Orion, which took place from 2 to 14 May at the Santa Margarida training area, was to certify the Portuguese Army's capabilities in planning and conducting conventional operations within NATO's Article 5. In addition to the Portuguese Mechanised Brigade, the Spanish 11th Brigade *Extremadura*, which deployed Leopard 2E tanks and Pizarro infantry fighting vehicles, took part in this exercise, the largest tactical drill carried out by the Portuguese Army.

Both Brigades have been twinned since 2019, although the decision to do so dates back to 2016, the year in which the 11th Brigade *Extremadura* took part for the first time in this exercise with 100 service members, a collaboration that has been increasing over the years. The current edition was followed on the front line by Army Chief of Staff, Francisco Javier Varela, who visited the training area together with his Portuguese counterpart, General José Nunes da Fonseca.

Operation Atalanta

THE European Union mission to combat piracy in the Indian Ocean, has a new commander, Vice Admiral José María Núñez Torrente.

He has been Commander of the Spanish High Readiness Maritime Force (COMSP-MARFOR) HQ, Chief of Staff of the Fleet (in that position he was also Chief of Staff of the Maritime Component of COVID-19 Operations *Balmis* and *Baluarte* and director of the Naval Military School.



OVERVIEW



Zachary Stahlberg/US Army

Field artillery

A Battery of the RALCA No. 63 in Germany

THE Spanish Army's Campaign Rocket-Launcher Artillery Regiment (RALCA) No. 63, part of the Field Artillery Command, validated its TALOS fire support command and control system during exercise *Dynamic Front 21*, which took place from 3 to 21 May in Germany and Poland. It has thus been integrated in the ASCA (Artillery Systems Cooperation Activities) community.

Dynamic Front is a multinational exercise led by the US Army and the German Army and designed to improve the

allied countries' ability to deliver long-range firing capabilities. It involved 1,800 military personnel from 15 nations testing some 70 artillery systems. Its aim was to ensure that, in the event of conflict, German Army gunners could coordinate fire missions with allied ground forces anywhere in Europe.

Spanish materiel and personnel were transported by sea and air to Germany, including 155/52 SIAC (Field Artillery Integrated System) self-propelled howitzers, which were loaded in the port of Santander.

NATO special operations

Exercise *Trojan Footprint-South 21*

The Joint Special Operations Command (JSOC) has led Spain's participation in *Trojan Footprint-South 21*. The exercise aimed at improving interoperability and capability among NATO's special operation forces and partner countries.

The exercise was conducted in Germany, Hungary, Romania, Georgia,

Croatia, Bulgaria, Montenegro and the Republic of North Macedonia, as well as in different areas of the Adriatic and Black Seas. Our soldiers were part of the CJSOTF (Combined Joint Special Operations Task Force) and ECG (Exercise Control Group) headquarters located in Stuttgart (Germany). In addition to these posts, Spain deployed officers to the command posts of the SOTG (Special Operations Task Groups) in Bulgaria and Romania, integrated a team of Green Berets (Army's Special Operations Command) in a Bulgarian SOTG and another one from the Navy's Special Naval Warfare Force in a Romanian SOTG.



EMAD

EU Military Committee

General Claudio Graziano in Spain

On 4 February, the Minister of Defence, Margarita Robles, held a working meeting with the Chairman of the European Union Military Committee (CEUMC), General Claudio Graziano, during his visit to Spain. A day later, he was received by the Chief of Defence (CHOD), Admiral General Teodoro López Calderón, at the Defence Staff Headquarters. After signing the book of honour, Graziano and the CHOD spoke of Spain's contribution to EU missions.

Previously, the CEUMC addressed a conference to the students of the Armed Forces Staff Course at the Centre for National Defence Studies (CESEDEN). General Graziano also headed to



Retamares Base, in Pozuelo de Alarcón (Madrid), to visit the Operations Command (MOPS), where he was received by its Commander, Lieutenant General Francisco Braco.

General Graziano learned first-hand about the planning, monitoring and conduct of the Armed Forces' joint operations, both overseas and permanent

ones, and more specifically those of the European Union. Finally, General Graziano held a videoconference with the Spanish contingent in EUTM Mali, the Detachment 'Marfil' (Senegal), frigate *Reina Sofía* and the Detachment *Orion*, the latter two of which are part of the EUNAVFOR *Atalanta* operation to combat piracy in the Horn of Africa.

Air Transport Training

The programme has been conducted in Lanzarote

TRADITIONALLY held in Zaragoza, this year the European Tactical Airlift Programme (ETAP) Course was held at the Lanzarote military airfield from 15 to 25 March. The best location given the current pandemic scenario, according to Colonel Nicolás Ramírez Arregui, airfield commander. Four nations —Germany, Denmark, Italy and Spain— participated with aircraft, and Switzerland as an observer. In total, around 120 crew and support staff.

During the course, seven flight missions of varying complexity were carried out at night using Night Vision Goggles (NVG) to train assault shots and tactical approaches on short runways in the islands of La Gomera and El Hierro, loading and off-loading

operations of the aircrafts with the engines running (ERO) and combat off-loading in Fuerteventura and Lanzarote. Exercises also included unit infiltrations and exfiltrations between the islands, simulated dropping of personnel and cargo in different places, H-LOW-HI flight profiles with land and air threats and defensive threat reaction manoeuvres

against enemy fighter planes and a Composite Air Operation (COMAO) mission including personnel recovery procedures.

The course programme has been slightly modified to minimise the chances of COVID-19 contagion by adapting the standard procedures for joint inspection and cargo dropping and also by simulating the launching of personnel.





Armada

Deployment of the OPV Furor

Three months on the African coast

The offshore patrol vessel *Furor* (P-46) set sail from its base in Cartagena on 5 March towards the western coast of the African continent. It has three months ahead during which it will conduct maritime security and defence diplomacy operations, mainly off the coast of Guinea.

Maritime security operations will be conducted both at sea and in the ports of the neighbouring countries of the Gulf of Guinea, which will support the training and advice in order to help reduce risks in the area and thus improve the stability in the region. As part of the Defence Diplomacy Plan, the ship will help strengthen ties and enhance mutual understanding with these countries. During the deployment, the *Furor* will participate in the EU's Coordinated Maritime Presence (CMP) pilot project in the Gulf of Guinea and will conduct joint patrols with other vessels in the area. To carry out these missions, the *Furor* has a specific crew for the mission made up of 68, including the ship's own crew (54 people), an Operational Security Team (EOS) belonging to the Spanish Marines, an interpreter, a doctor and a diving instructor.

Exercise Iniochos'21

F-18s from Torrejón and Zaragoza Air Bases train in Greece

EIGHT EF-18M fighter jets from the 12th and 15th Fighter Wings of the Spanish Air Force were deployed to the Greek air base of Andravida to participate for the first time in the multinational exercise Iniochos'21, organised by the Greek Air Force, which took place from 12 to 22 April with the participation of Air Forces from the United States, France, Israel, the United Arab Emirates and Cyprus.

This annual air exercise aims to enhance combat readiness and fighting capability, while also offering the opportunity to conduct complex air operations or Composite Air Operations (COMAO) in a multinational, joint force environment.

For their deployment, the Spanish fighters were supported by A400M transport aircraft from the 31st Fighter



Ejército del Aire

Wing and an Airbus A310 from the 45th Air Force Group. This year, the US participated with F-16C Fighting Falcon fighter-bombers, as well as a KC-135 aerial refuelling aircraft and an MQ-9 Reaper unmanned aerial vehicle. France deployed Rafale and Mirage 2000D fighter jets, the United Arab Emirates its F-16E/F, Cyprus an AW139 SAR helicopter, and Israel its F-16I and F-15I fighters. The Greek hosts provided F-16 and Mirage 2000 fighters, as well as EMB-145H early warning aircraft and a P-3 Orion.

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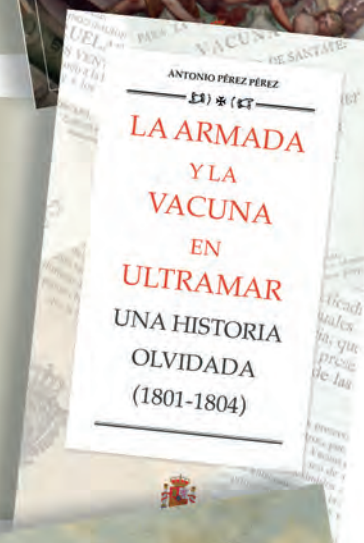
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