Protecting Europe: meeting the EU's military level of ambition in the context of Brexit

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Key takeaways

- The ability of the European Union to act in defence, today and in the future, is an important reference point in the discussion relating to strategic autonomy and to the impact of the British exit from the Union (Brexit). The EU has set itself a military level of ambition. This study assesses to what extent the EU is able to fulfil this level of ambition, today and with an outlook towards a 2030 horizon.
- EU member states want to be able to conduct a range of military operations under the heading of the Common Security and Defence Policy (CSDP). Using a number of operational parameters and concurrency assumptions, the IISS and DGAP have developed policy-compliant scenarios in order to benchmark existing and future EU member state capabilities against the force requirements the EU level of ambition generates.
- The EU Global Strategy (EUGS) has led to some adjustments but not to a wholesale review of military-planning assumptions. The relevant scenario families are therefore peace enforcement (up to 4,000 kilometres from Brussels); conflict prevention (up to 6,000 km from Brussels); stabilisation and support to capacity-building (up to 8,000 km from Brussels); rescue and evacuation (up to 10,000 km from Brussels); and support to humanitarian assistance (up to 15,000 km from Brussels).
- EU member states want to be able to conduct more than one operation at a time in the CSDP framework. It is this concurrency of operations that will create real stress on capabilities, much more so than any one of the scenarios mentioned above taken by itself. Moreover, sustainability is a problem. While short-term operations might be possible when using all available assets, those requiring one or more rotations will overstretch European armed forces.
- Of the IISS-DGAP scenarios, only the rescue and evacuation operation (located in South Africa) and the support to humanitarian-assistance operation (located in Bangladesh) did not generate any capability shortfalls if the current 28 EU member states (EU 28) contribute to the force pool. If the United Kingdom is omitted (EU 27), the humanitarian-assistance operation faces a shortfall in the naval domain.
- The scenarios concerning peace enforcement (located in the Caucasus), conflict prevention (located in the Red Sea and Indian Ocean), and stabilisation and support to capacity-building (located in Somalia/Horn of Africa) would all create significant capability shortfalls, even when the EU 28 is considered. The EU 27 would face much greater shortfalls, in particular because the UK would be able to provide important enabling and high-end capability in each case. Under those circumstances, a successful implementation of the operation is doubtful.
- The larger peace-enforcement and stabilisation and support to capacity-building scenarios also highlight the scarcity of non-NATO HQs for higher echelons (corps level, large air and maritime commands).
- If the peace-enforcement scenario is combined with the rescue and evacuation scenario, notable capability shortfalls emerge across all domains for the EU 28. Without the UK contribution, additional shortfalls would arise in the land and naval domain and with regards to enablers.
- If up to seven of the smaller operations are combined – which corresponds to the EU level of ambition – the EU 28 is out of its depth. There are extensive capability gaps across all domains and often less than one-third of the force requirement would be met. Removing the UK from the picture renders a bad situation much worse. Existing shortfalls would be even more pronounced.
- Improvements in some areas are likely by 2030. For example, in the maritime domain there are plans for the procurement of destroyers and frigates across

the EU 28. Submarines will also receive an uplift in capability thanks to planned procurements. The situation will also likely be less critical with a total of five aircraft carriers projected in the EU 28. The ongoing procurement of heavy transport helicopters in the EU 28 is likely to have an impact as well.

- Nevertheless, current procurement plans of the EU 28 up to 2030, to the extent that they are visible at this point, will not close the identified capability shortfalls, and ageing equipment will increasingly become a problem.
- As of 2018, EU strategic autonomy is limited to the lower end of the operational spectrum. The prospects for significant change are slim over the coming decade based on current government plans. Brexit will make it even more necessary to find a constructive combination of European partnerships and transatlantic engagement.

1. Taking the Common Security and Defence Policy seriously

The European Union has made rapid progress in the area of security and defence since late 2017. There is political momentum to proceed with the Permanent Structured Cooperation (PESCO) framework on defence; pilot projects are underway to harmonise defence-planning processes among member states under the heading of the Coordinated Annual Review on Defence (CARD); and the European Commission is beginning to make money available for defence research and development in the form of the European Defence Fund (EDF). EU heads of state and cabinet ministers are once more debating about visions for a 'European Army' and are exchanging views on how European strategic autonomy in security and defence should look. In 2016, the EU Global Strategy (EUGS) argued that 'an appropriate level of ambition and strategic autonomy is important for Europe's ability to promote peace and security within and beyond its borders'.[1]

Several factors explain the accelerating pace, the multitude of initiatives, and some of the newfound political will. Firstly, EU member states are united in their assessment that the European security environment has deteriorated; threat perceptions are up. Secondly, the current United States administration has repeatedly called for greater European investments in the field of defence and has suggested that its own commitment to defending Europe could be conditional on those demands being met by European governments. Thirdly, now that most European countries have made progress in moving on from the economic crisis that hit in 2008, there is more fiscal space in Europe for defence spending. And finally, the United Kingdom – one of the two most capable military actors among the members, and which has often been opposed to closer defence cooperation in the EU framework – is set to exit the EU in 2019 (Brexit).

The issue that policymakers are conveniently avoiding, however, is the military level of ambition into which their political guidance would translate. What kinds of assets and forces are needed? How do existing capabilities align with political-military ambitions and what needs to be done in terms of capability development and cooperation to close existing shortfalls by 2030? In other words, what is the shape and form of a European military-capability suite that is fit for purpose and in what ways will it be affected by the changing international environment, in Europe and beyond?

Building on recent work examining European defence in the context of Brexit and drawing on extensive military and defence-data holdings, the International Institute for Strategic Studies (IISS) and the German Council on Foreign Relations (Deutsche Gesellschaft für Auswärtige Politik, DGAP) launched a study to begin to deliver answers to these questions. We started by taking the EU's Common Security and Defence Policy (CSDP) seriously, in order to grasp the implications of the military level of ambition it delineates. The CSDP's military level of ambition can be gleaned from publicly available documents and declarations.

EU member states want to be able to conduct a range of military operations. Using a number of operational parameters such as the distance from Brussels, intended duration, lead time and concurrency assumptions, it is possible to develop policy-compliant scenarios. These scenarios, of course, only describe some of the many possible contingencies. However, as long as they are plausible, they can provide a very useful backdrop to think through what kind of force requirements the stated EU level of ambition, as it currently stands, might generate. On that basis, it is then possible to benchmark existing and future EU member state capabilities against these requirements. Doing so generates both an assessment of existing capability shortfalls and a judgement on where British military capabilities are likely to be critical for EU military success.

The remaining chapters of this study take the reader step by step through this process. Chapter two outlines the political-military level that the EU member states have defined for themselves. Chapter three then summarises plausible scenarios that could trigger future

military operations conducted by the EU under the CSDP. These scenarios each include outlines of a concept of operations required to fulfil the mission, and consequently a statement of force requirements and an assessment of capability gaps. Chapter four expands this analysis by presenting the effects of different concurrency assumptions: what happens if the EU has to undertake two or more operations simultaneously? Chapter five projects forward to 2030 to present a picture of how the situation is likely to change. Finally, an annex provides data material in support of the judgements we have made and clarifies some of the methodological assumptions the research team has utilised.

Notes

1 European Union Global Strategy, 'Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union's Foreign and Security Policy', Brussels, June 2016, available at https://europa.eu/globalstrategy/sites/globalstrategy/files/regions/files/eugs_review_web_0.pdf.

2. The level of ambition: what should the EU be able to do?

This study takes the European Union's level of ambition as the main starting point for its assessment. The level of ambition has a political and a military dimension. The political dimension gives guidance about what actors want to be able to do in foreign- and security-policy terms. The military dimension explains what kind of military tasks EU member states want to take on in the framework of the EU's Common Security and Defence Policy (CSDP).

The EU political-military level of ambition, as far as it can be constructed in an open-source environment, thus provides assumptions about: the types of operations the EU wants to be able to conduct; the ceiling as far as the overall size of operations is concerned; rapid response; and geographical reach. Together, all of these elements were used to construct the scenarios presented in this study. They are policy compliant, in the sense that they fit within the publicly known parameters.

The political-military framework

While there is an established political-military framework guiding CSDP operations, there is no strict rule as to when and how political guidance is translated into military ambition. For the EU, several elements that are connected but do not establish a linear cause for action are relevant – the policy discourse is about an ambition the EU should be able to achieve, not a level of activity the EU must meet. An important caveat is that the level of ambition as defined in the CSDP will almost never be equal to the overall military level of ambition that member states set for themselves on the national level. For example, many EU member states will set collective-defence ambitions to make their contribution within NATO that will go beyond EU ambitions. Other member states might reserve a part of their capacity for other multinational organisations, or to service bilateral security obligations or other national commitments. In other words, while the EU level of ambition is an important reference point for EU member states, it only describes a part of each state's total ambition.

There are a range of guidelines that inform what the EU and its member states seek to be able to do. The most important ones are the EU Global Strategy (EUGS), the Petersberg tasks, the military illustrative scenarios and the headline goals. There is no clear-cut doctrinal hierarchy among these. Instead, they jointly offer planning parameters such as the scale, duration, distance of theatres from Brussels and the kind of military operations that could be conducted.

The EU's political-military level of ambition begins with a statement providing strategic political guidance. The current level of ambition is informed by the EUGS of 2016. The EUGS sets three overarching aims for EU action: responding to external conflicts and crises; building the capability and capacity of external partners; and protecting the EU and its citizens. They are further expounded in the related council conclusions of November 2016.[1] The aim to be able to protect EU territory and people arguably represents a high level of ambition, in particular when comparing the EUGS to the EU Security Strategy of 2003, which the former replaced.

The political guidance should then be translated into a range of military tasks, defining the type of operations the EU aims to undertake. The EUGS has not led to a complete review of the relevant military planning assumptions. A possible reason could be that while EU member states endorsed the EUGS, they never formally adopted it, and therefore might not fully accept the military implications it raises. This applies especially to the implication of the far-reaching but ultimately undefined expressions regarding European strategic autonomy or full-spectrum defence capabilities. However, the EUGS has more closely defined the details regarding tasks, distances, reaction times and the need to be able to conduct several operations simultaneously.[2]

The Petersberg tasks

The basis of the current military level of ambition for the EU remains the same as was outlined in the 2009 Treaty of Lisbon: conflict prevention and peacekeeping tasks;

tasks of combat forces in crisis management, including peacemaking; joint disarmament operations; military advice and assistance; post-conflict stabilisation; and humanitarian and rescue missions. This 2009 list is in itself a revised and expanded version of the Petersberg tasks, a set of military crisis-management tasks originally drawn up in 1992 in the framework of the Western European Union (WEU). The Petersberg tasks represented the original military level of ambition before the CSDP first emerged in 1999 and 2000. Through the 1999 Treaty of Amsterdam, these were integrated into the EU. They originally comprised peacekeeping and humanitarian and rescue tasks, as well as those of combat forces in crisis management (including peacemaking).

Military illustrative scenarios

The generic task list then forms the basis of so-called illustrative scenarios, which indicate which type of operation and action should be conducted, and thereby operationalise in practical terms what the military level of ambition implies. These scenarios, details of which remain classified, use a range of planning assumptions. They would, for example, explain how far away from Brussels an operation would take place, how quickly the operation would need to commence, and for how long it is expected to last. These planning assumptions are important to think through what kind and how many military assets, personnel and, in general, military capability would be necessary to conduct the operation successfully. While a full open-source description of the illustrative scenarios is not possible based on the available information, it is known that the scenarios cover the following operations:

- Peace enforcement (PE), up to 4,000 kilometres from Brussels;
- Conflict prevention (CP), up to 6,000 km from Brussels;
- Stabilisation and support to capacity-building (SSCB), up to 8,000 km from Brussels;
- Rescue and evacuation (RE), up to 10,000 km from Brussels;
- Support to humanitarian assistance (SHA), up to 15,000 km from Brussels.

EU headline goals

Additional important information can be gleaned from what the EU refers to as headline goals. These goals describe in broad strokes the types and quantities of forces and assets the EU member states should pledge to make available, in order to fulfil the political level of ambition these governments set for themselves in the framework of the CSDP.

Member states have set themselves two military headline goals which complement each other: the

Table 2.1: **Types of operations**

	Rescue and evacuation	**Support to humanitarian assistance**	**Conflict prevention**	**Stabilisation and support to capacity-building**	**Peace enforcement**
Possible CSDP military operations	Civilian and military rapid response, including military rapid-response operations *inter alia* using the EU Battlegroups as a whole or within a mission-tailored force package		Preventive engagement Preventive deployment Joint disarmament operations Embargo operations Counter-proliferation	Civilian capacity-building Security-sector reform Peacekeeping Election-monitoring Institution-building Support third countries in fight against terrorism	Joint crisis-management operations Tasks of combat forces in crisis management Peacemaking Secure lines of communication
	Non-combatant evacuation operation	Atrocity prevention Consequence management	Joint stabilisation operations, including air and special operations		
			Aerial security operations, including close air support and air surveillance		
			Maritime security or surveillance operations; longer term in the European region		
Type	Smaller Joint Operation	Smaller Joint Operation	Smaller Joint Operation	Smaller Joint Operation	Major Joint Operation

Helsinki Headline Goal from 1999 and the Headline Goal 2010. The Helsinki Headline Goal argued that EU member states should be able to deploy rapidly and sustain forces capable of the full range of Petersberg tasks, including the most demanding, in operations up to corps level (50,000–60,000 personnel). These forces should be militarily self-sustaining with the necessary command, control and intelligence capabilities, logistics, other combat-support services and additionally, as appropriate, air and naval elements. Member states should be able to deploy in full at this level within 60 days, and within this to ensure smaller rapid-response elements available and deployable at very high readiness. This level of effort was meant to be sustainable for one year.

The Headline Goal 2010 focuses on qualitative aspects. It sets the objective that EU member states will 'be able by 2010 to respond with rapid and decisive action applying a fully coherent approach to the whole spectrum of crisis management operations covered by the Treaty on European Union'.[3] The creation of the EU Battlegroups in 2007 has been the most prominent outcome of this headline goal.

Concurrency

The EU wants to be able to conduct more than one operation at a time. Presidency conclusions from 2008 suggest that the EU is considering a concurrency suite of two stabilisation operations, two rapid-response operations, a rescue and evacuation operation, a humanitarian-assistance mission and a maritime or air-surveillance/air-interdiction mission. Being able to conduct these missions simultaneously would presumably describe the upper end of the level of ambition. Other combinations of the kinds of operations the EU wants to be able to conduct can of course be found, leading to a similar-sized engagement but a different force requirement as far as capabilities are concerned.

Notes

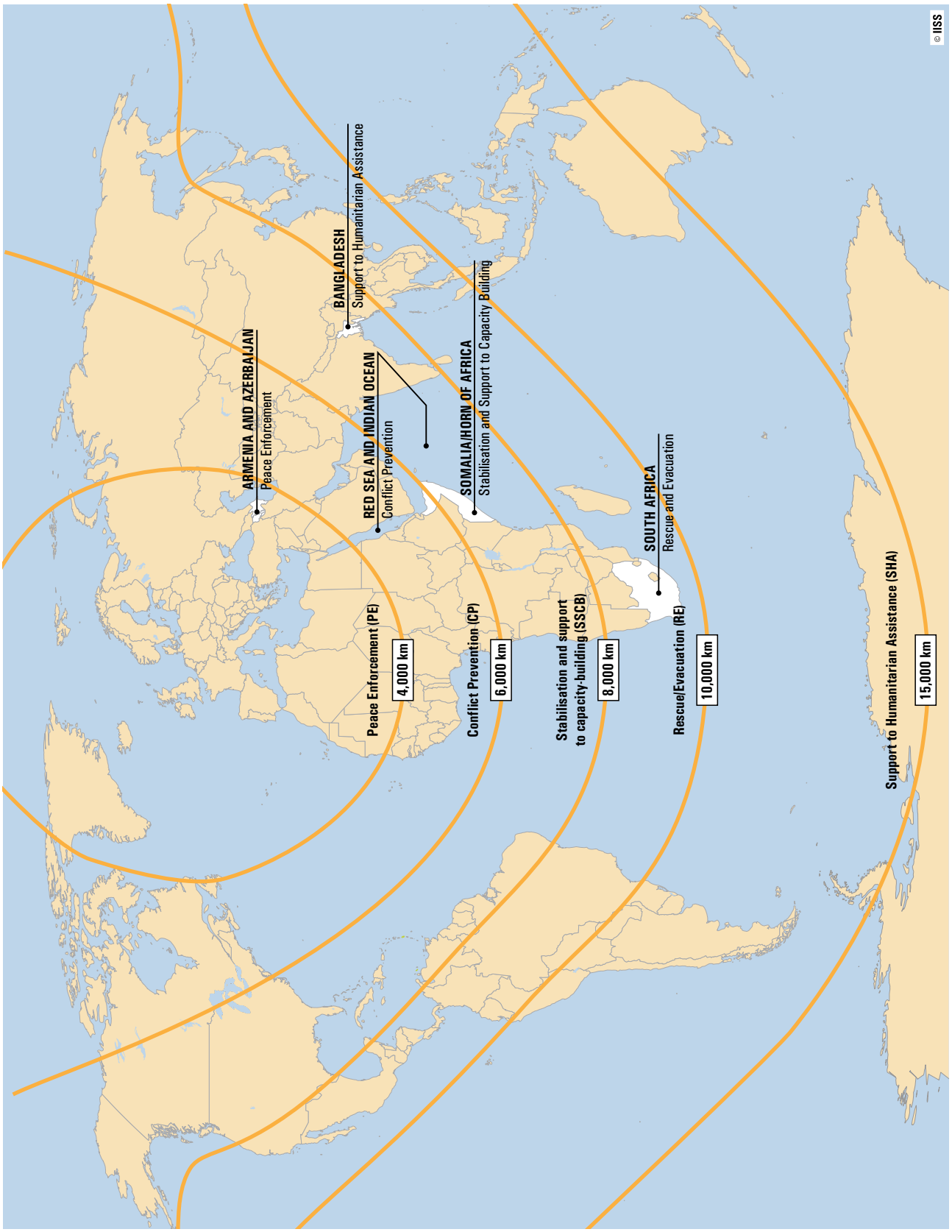
1 Council of the European Union, 'Council Conclusions on Implementing the EU Global Strategy in the Area of Security and Defence', Brussels, 14 November 2016, available at https://www.consilium.europa.eu/media/22459/eugs-conclusions-st14149en16.pdf.

2 The concrete parameters are defined in the 'Requirements Catalogue' and were confirmed by the EU Political and Security Committee in 2017. The details remain classified.

3 European Union Council Secretariat, 'Development of European Military Capabilities', Brussels, November 2006, available at https://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/esdp/91704.pdf.

3. Illustrative scenarios for EU military operations

Map: **Scenarios for EU military operations 2020**



3.1 EU peace-enforcement mission in the South Caucasus

Scenario

It is 2 April 2020. The Dubai Treaty has ended the recent bloody war between Armenia and Azerbaijan. The United Nations Security Council has today endorsed the treaty and the role assigned to the EU Force South Caucasus (EUFOR–SC) to enforce the treaty's military provisions.

Escalating tensions between Armenian and Azerbaijan are exacerbated by terrorist attacks in both countries in the early months of 2019. Those in Armenia were claimed by the Islamic State, also known as ISIS or ISIL. There are sabotage attempts against the Azerbaijani oil industry which Baku attributes to Armenian special forces. Tension rose greatly with escalating military clashes between the two countries' forces.

There is intense war between both states between October 2019 and February 2020. Both gain and lose territory and there is indiscriminate use of air, rocket and ballistic-missile strikes on towns, cities and infrastructure. Social media is weaponised by both sides to show the world many instances of civilian casualties, atrocities, ethnic cleansing and masses of destitute displaced persons. Many refugees flee to Iran and Turkey. The war causes global consternation among Muslims. Both ISIS and al-Qaeda declare jihad against the Armenian government. Angry young Muslim men in the Middle East, Russia, Turkey, Iran and the European Union all pledge to fight for their brothers in Azerbaijan. Armenia accuses Iran of using Quds Force agents against it.

Iran, Russia and Turkey are all gravely concerned by destabilising consequences for themselves and the region. In an unprecedented display of cooperation, they convene to negotiate a ceasefire and ask the EU to be prepared to implement and enforce any peace agreement. The EU also offers to lead a complementary civilian mission, including coordinating humanitarian relief and reconstruction. The resulting Dubai Treaty provided for an immediate ceasefire, restoration of territory to the status quo *ante bellum* and a military annex modelled on that of the 1995 Dayton peace agreement.

Although US–Iran relations are less hostile than in 2018, the US military is heavily committed to the South China Sea and the Korean Peninsula, where tensions are very high, and to the war in Afghanistan. The US president tweets that he is 'very pleased to see EUROPE PAYING ITS MILITARY DUES!'

Both nations' armed forces have suffered about 40% attrition. They currently man their front-line positions in strength. There is a constant stream of low-level ceasefire violations and landmines have been laid indiscriminately. Paramilitary, guerrilla and armed violent extremists play a major role in the war and appear responsible for ethnic cleansing and other atrocities. Some jihadi mujahideen groups are found in both countries. The locations and strengths of these irregular forces are unknown.

The Dubai Treaty

The warring entities commit to sustaining the current ceasefire, detailed mapping of the agreed ceasefire line (ACFL) and an establishment of a ten kilometre-wide Zone of Separation (ZOS) by permanent members of the UN Security Council, using national technical means. The parties agree to give the EU high representative the authority to monitor civilian implementation of the treaty and to coordinate non-military assistance to the entities, UN agencies, approved international humanitarian organisations and NGOs.

Both entities have lost some territory and captured other territory. Nagorno-Karabakh has survived as an enclave. The treaty requires the entities to transfer the territories seized from one another, therefore restoring the status quo before the war, as established in the 1994 Bishkek Protocol. EUFOR–SC takes control of these areas of transfer from D+45 to D+90 (D Day being when the European forces launch their operations). The long-term status of Nagorno-Karabakh remains subject to the 1994 Bishkek Protocol and the Organization for Security and Cooperation in Europe (OSCE) Minsk Group process of negotiations.

In a confidential memorandum of understanding with the EU, Georgia, Iran, Russia and Turkey agree to share threat intelligence with EUFOR–SC. They also agree that they will cut any ties with irregular armed groups in the area of operations (AO) and will use their best offices to encourage any foreign fighters to leave the AO.

EUFOR–SC has the right to use force in self-defence and proactively to ensure compliance with the military

annex of the Dubai Treaty. The EUFOR–SC commander has authority to use 'all necessary means' to establish a safe and secure environment in the AO and to enforce the provisions of the treaty's military annex. EUFOR–SC has unconstrained freedom of movement in the AO. The EUFOR–SC commander also has the authority to convene a joint military commission (JMC) to give direction to entity forces. These authorities may be delegated within EUFOR–SC as necessary.

Access, basing and overflight

- NATO agrees to enable force deployment through its territory, airspace and waters. NATO airfields will be available for strategic lift and basing of EUFOR–SC air component.
- Kazakhstan and Turkmenistan offer air-basing and overflight rights.
- Russia agrees that its forces based in northern Azerbaijan will not interfere with EUFOR–SC's work and that their facilities would, in principle, be available for logistic and other non-lethal support.
- Georgia offers use of ports, airfields, roads and rail, for overflight rights for logistic and medical aircraft, but not for the basing of combat aircraft.
- The Montreux Convention continues to apply.

Land lines of communication

- Russia offers to provide air and rail transit for personnel and non-lethal supplies and military equipment along the lines of its assistance to the NATO withdrawal of the International Security Assistance Force (ISAF) from Afghanistan. Moscow undertakes to support EUFOR–SC use of the Black Sea and routes through Georgia, provided that NATO does not threaten the status quo of the conflicts in Georgia and Ukraine.
- Iran explains to the EU that, while transit by armed forces of countries allied to the US would be unacceptable to the Iranian people, it is willing to supply fuel, food and Iranian contractors to assist EUFOR–SC.
- All states agree to provide necessary force protection to EUFOR–SC forces, personnel, equipment and supplies transiting their territory.

EU Military Committee-endorsed concept of operations

Force requirement

EUFOR–SC headquarters (HQ) is to be an EU-led Combined Joint Task Force (CJTF) HQ. It is to have land, maritime, air and Special Operations Forces (SOF) components and a rear-support command. The land component is to be an EU multinational corps of three multinational armoured/mechanised divisions – each with three brigades and necessary combat support (CS) and combat-service support (CSS). Corps troops include the following brigade types: air-mobile/air-assault, as a corps reserve; engineer; explosive ordnance disposal (EOD); military policy (MP); intelligence, surveillance and reconnaissance (ISR); signal; civil–military cooperation (CIMIC); information operations; aviation; and air/missile defence. It is assumed that the two EU Battlegroups on rotation are available for preliminary operations. The assumed maximum EUFOR–SC footprint in AO is approximately 60,000 EU troops. To cover the critical period D-3 to D+30, a quick-reaction amphibious battlegroup is required, to be based in the Black Sea.

Preliminary operations

It is assumed that the Dubai Treaty will be endorsed by the UN Security Council not later than D-30 days. The air component is to activate necessary air bases to assume control of airspace on D-3 and provide security for the air deployment of the land component into the AO at airports of disembarkation (APODs). The maritime component is to secure sea lines of communication (SLOCs) and assist with activating sea ports of debarkation (SPODs). Logistics remains a national responsibility, but the EUFOR–SC Rear Support Command will coordinate movement. This requires a logistic brigade, a maritime patrol brigade and a signal brigade for route activation and initial EUFOR–SC deployment.

Initial Rapid Deployment Operations, D-30 to D+30

On D-15 EUFOR–SC will rapidly deploy reconnaissance forces, with combat-capable air and land forces

deploying into the AO from D-3. On D Day, HQ EUFOR–SC, multinational corps HQ and multinational divisions' HQs are to be operational in place and each multinational division is to have a brigade's worth of ground combat power in its AO. By D+30, all multinational divisions are to deploy three brigades and essential combat support and logistics, to provide for supervision and enforcement of the separation of forces. The EU Military Committee sets the additional requirements:

- Mission duration of up to a year. Assume that civilian sealift and airlift will be unwilling to deploy to AO before D+31 and that contract logistics, other than water and fuel, are unavailable in AO before D+90. These constraints do not apply to Georgia, Russia and Turkey.
- Fixed or rotary wing Combat Air Support (CAS) to be available 24/7 throughout AO, within 20 minutes of request.
- Field hospitals to be deployed for each multinational division. Seriously wounded or injured EU civilian and military personnel to reach hospital within one hour of wounding.
- Without prejudice to military requirements of the Dubai Treaty, EUFOR–SC is to assist EU high representative and support UN agencies and approved international humanitarian organisations and NGOs.

EUFOR–SC commander's initial concept of operations to guide planning

Issued to HQ, component commanders and Rear Support Command in Brussels on D-30.

Objective

To establish sea, air and land lines of communication in order to achieve initial operating capability of forward HQs and early-entry forces in the AO by D Day, with full force capability operational in AO to supervise, verify and if necessary enforce withdrawal of entity forces outside ZOS by D+30 – the campaign decisive point.

D-30 to D-3

- Reconnaissance, liaison and planning teams from EUFOR–SC and component HQ deploy to AO.
- Activate EUFOR–SC Rear Support Command HQ and deploy to Turkey.
- Establish land lines of communication through Russia, Georgia and Turkey, including essential logistic, MP and command and control (C2) forces.
- Open sea lines of communication to Georgia and Turkey; be ready to open air line of communication on D-3.
- Establish air-component bases around AO to have air component ready for operation on D-3.

Assemble early-entry forces; these are to be prepared to move rapidly into AO from D-3 to D Day. To consist of:

- Forward HQs from EUFOR–SC, HQ Rear Support Command components and three multinational divisions.
- The Combined Joint Special Operations Task Force (CJSOTF).
- An early-entry brigade for each multinational division, comprising light forces and rapidly deployable armour, with sufficient aviation, CS and CSS to sustain initial operations.
- Two EU Battlegroups.
- An amphibious battlegroup in Black Sea (force reserve).

Assemble EU battlegroups and early-entry forces not deployable by air in forward assembly areas as close as possible to the AO in Turkey and Georgia.

D-3 to D Day

CJSOTF to establish liaison with entity armed forces HQ to brigade level. Use land and air to rapidly deploy early-entry forces as follows:

- EU Battlegroups to Yerevan and Baku to secure HQ sites and act as quick-reaction forces (QRFs).
- HQ EUFOR–SC to Baku.
- HQ Rear Support Command to Yerevan.
- Land-component HQ to Ganja (Azerbaijan).

D Day: high-visibility operations to demonstrate EUFOR–SC presence and freedom of movement

Land-component early-entry forces supported by air component and CJSOTF to open and then control

crossing points across the ZOS, with cooperation of entities if possible, unilaterally if necessary. Escort the International Committee of the Red Cross (ICRC), accredited humanitarian organisations and humanitarian relief aid across the ZOS, to demonstrate freedom of movement. High-visibility deterrent sorties by air component throughout the AO.

D Day to D+30: create conditions for separation of forces on D+30

The conditions for the separation of forces to be created via high-visibility activity within 20 km of ACFL to demonstrate to entity armed forces that EUFOR–SC presence in forward area allows them to safely leave their positions in the ZOS by D+31. Requires EUFOR–SC to rapidly grow land component to full capability. Key tasks:

- Locate all entity armed forces within 20 km of ACFL.
- Open more crossing points – at least one per brigade.
- Protect and supervise mine and EOD clearance in ZOS.

Combined Joint Statement of Requirement

Air-component outline

Requirement for 250 sorties a day, of which 80–100 could provide close-air support. A minimum of 150 multi-role combat aircraft are required. This total could include armed uninhabited aerial vehicles (UAVs) if available, as well as one or two squadrons of attack helicopters.

Air-component assumptions

There will be no in-theatre fixed-wing basing because of risk, force-protection requirements and the existing damage to the main bases of the belligerents. Units will rotate on a six-month basis. The tempo of operations for combat aircraft is for a sustained operation, not a surge. The sortie-generation rate is 1.25 a day based on an average aircraft availability of 70%. There will be a requirement for a transport surge prior to the operational start line. The following air bases in Turkey, vacated by Turkish Air Force units, can be used: Batman, Diyarbakır, Erkilet, Erzurum, Igdır and Kars.

Table 3.1: **Extract from the military annex to the Dubai Treaty.** The EUFOR–SC AO is Armenia and Azerbaijan (the entities).

Time	Activity
D-30	EUFOR–SC reconnaissance parties allowed entry to AO and access to civilian infrastructure, including road, rail and airports.
D-3	All air early-warning, air-defence and fire-control radars are shut down. All entity military aircraft grounded. EUFOR–SC assumes control of airspace. Parities cease deployment of landmines. EUFOR–SC has unlimited freedom of movement throughout AO.
D Day	All state forces and non-state armed groups withdraw to either side of ZOS.
D+30	All forces which are not of local origin withdraw from both entities. 1. All armed civilian groups, unless police, disband. Police limited to small arms and riot-control equipment and vehicles. 2. Parties withdraw behind ZOS. 3. Parties remove or destroy landmines and explosive devices in ZOS as required by EUFOR–SC. 4. Under EUFOR–SC supervision parties decommission all active sea mines. 5. EUFOR–SC to provide military security in areas of transfer. 6. Parties inform JMC of deployments within ten km of ACFL. 7. Parties release and transfer all prisoners held.
By D+45	Areas of transfer are to be vacated by occupying entity.
By D+90	Incoming forces allowed to enter areas of transfer.
D+91	EUFOR–SC ceases to provide military security in areas of transfer.
D+120	1. Parties withdraw forces and weapons to cantonment areas/barracks/military airfields and naval bases, as approved by EUFOR–SC. 2. All movement in and out of barracks and activity by state armed forces to be subject to permission from EUFOR–SC. 3. Parties demobilise forces that cannot be cantoned. 4. Parties inform JMC of all forces and heavy weapons in AO. 5. Police forces to be limited to small arms, riot-control weapons and light armoured vehicles. To be monitored by EUFOR–SC and the EU Police Mission. 6. EUFOR–SC authorised to conduct no-notice inspections of entity armed forces, police units and their bases.

Air-component force requirement:

- 158 fighter/ground-attack aircraft
- 12 suppression of enemy air defence (SEAD)/ destruction of enemy air defence (DEAD) aircraft
- 13 tanker aircraft
- 42 attack helicopters
- 12 armed combat ISR (CISR) UAV
- Nine unarmed UAV
- Nine ISR aircraft
- 16 heavy lift (not permanently deployed in Turkey)
- 13 medium lift (deployed in Turkey)
- 22 heavy transport helicopters
- 14 medium transport helicopters.

Maritime component outline

The United Kingdom, France, Italy and Spain have deployable two-star maritime component headquarters, but only the former two are free-standing without other ongoing national commitments. Possibly based initially at sea (in the eastern Mediterranean to avoid the requirement to redeploy in and out of the Black Sea) but could be deployed ashore (in Turkey), requiring host-nation support. Black Sea (Montreux Convention) restrictions on warship deployments require a split of the maritime component into a Black Sea and an eastern Mediterranean presence, with Black Sea elements requiring sufficient forces to maintain on-station tasks with a 21-day rotation pattern. Requirement for one aircraft-carrier group with three escorts, one submarine and two support ships in eastern Mediterranean, at least for D-3 to D+30, and possibly to D+60. The distance to the AO for carrier-based aircraft operating in the eastern Mediterranean is 900–1,500 km (requiring land-based tanking support). Requirement for on-station amphibious lift in the Black Sea for battalion-sized embarked force as force reserve for D-3 to D+30 (needs generation of two groups for rotation purposes). Requirement for on-station force in Black Sea of four surface combatants for SLOC cover for duration of operation and to support air-picture compilation and air-defence requirement, particularly from D-3 to D+30. Requirement for submarine with land-attack capability as part of potential enforcement package. Requirement for four mine counter-measure vessels (MCMVs) plus command/ support vessel to account for possible rogue element sea mine/seaborne improvised explosive device (IED) threat at ports of embarkation/disembarkation.

Maritime component assumptions

Major logistic SLOC established from ports of Constanta (Romania) and Varna (Bulgaria) to Poti (Georgia). Montreux Convention governing warship transits of Dardanelles Strait and deployments in Black Sea (including imposing 21-day rotational requirement for non-Black-Sea-state warships deployed in Black Sea). Montreux Convention individual standard displacement limit of 15,000 tonnes for non-Black-Sea-state warships precludes deployment into Black Sea of aircraft carriers and some large-deck amphibious shipping in European inventories (French *Mistral*, Spanish *Juan Carlos I*). Unit rotations at six months.

Maritime component force requirement

Deployed maritime component headquarters.

Naval task force consisting of:

- One aircraft carrier
- 2–3 large amphibious ships for two battalion-sized embarked forces
- 11 principal surface combatants
- Two nuclear-powered attack submarines (SSNs)
- One replenishment tanker
- One stores-support ship
- Two MCMV command ships
- Six MCMVs.

Land component and theatre command and control outline

CJTF HQ.

Rear Support Command, based on an existing joint-logistic HQ.

- Logistics brigade
- MP brigade
- Signal brigade.

CJSOTF, brigade-sized.

Land forces

Land component HQ. Deployable multinational corps HQ. Must include fully deployable signal brigade.

Corps troops. Could all be multinational brigades but needs to be formed on existing national brigade.

- Air-mobile/air-assault brigade as corps reserve.
- Engineer brigade.
- EOD brigade.
- MP brigade.
- Information-operations brigade.
- ISR brigade.
- CIMIC brigade.
- Air-/missile-defence brigade.

Map 3.1: **EU peace-enforcement mission in the South Caucasus**

		LAND	AIR	NAVAL
CAPABILITY ASSESSMENT (EU 28)	**SHORTFALL**	• Information operations • Civil–military cooperation (CIMIC) • Explosive ordnance disposal (EOD) • Military police • Medical • Intelligence, surveillance and reconnaissance (ISR)	• Combat ISR (CISR) uninhabited aerial vehicle (UAV) • ISR aircraft • Heavy transport aircraft • Electronic warfare aircraft • Tanker aircraft	• Aircraft carrier
	ADEQUATE	• Amphibious • Airborne • Signals • Mechanised • Logistics • Engineer • Reconnaissance • Special-operations forces	• Heavy transport helicopter • Attack helicopter • Fighter ground-attack aircraft	• Principal amphibious ships • Surface combatants • Nuclear submarines
	MORE AVAILABLE	• Air defence • Artillery • Armoured	• Medium transport aircraft • Medium transport helicopter • ISR UAV	• Mine countermeasures • Replenishments vessels
EU 27	**ADDITIONAL SHORTFALLS IF UK NOT INCLUDED**	• Signals	• None	• Nuclear submarines • Principal amphibious ships

3.2 EU stabilisation and support to capacity-building mission in the Horn of Africa

Scenario

It is 2 April 2020, D-30 for the operation. Al-Shabaab and other jihadi groups have rapidly reversed gains made over recent years in Somalia and reduced the government's footprint to the besieged city of Mogadishu. They also threaten Kenya. The UN Security Council has today authorised EUFOR–HOA to restore government control over Mogadishu, neutralise jihadi groups and assist the rebuilding of the African Union Mission in Somali (AMISOM) and Somali government forces, to allow a reconstituted government and AMISOM forces to restore Somali government authority over the country.

In 2018, the UN planned for security responsibilities to transition from AMISOM to Somali government security forces in the following year. In 2019, there is an influx of motivated, battle-hardened jihadists in Somalia, including ISIS fighters fleeing from Iraq, Syria and Libya, and al-Qaeda fighters from Yemen. The groups mount a coordinated offensive, rapidly overrunning many of the positions held by government forces. AMISOM, which has begun its withdrawal from the country, is overmatched. Both AMISOM and the Somali National Army are pushed out of rural Somalia, retreating to Mogadishu and northern Kenya. About half of their vehicles and heavy weapons are abandoned. Al-Qaeda announce a march on Nairobi. There is also a mass flow of Somali refugees into Kenya. Many refugees also enter Ethiopia and Eritrea, apparently intending to reach Europe.

All that remains under government control is Mogadishu. A weak brigade of the Somali National Army is besieged and rendered dependent on logistic and fire support from US forces. US Central Command (CENTCOM) is also providing some ISR and occasional precision strikes on jihadi networks by drones and special operations forces (SOF). But the Pentagon is prioritising Afghanistan, North Korea, Iran and China. It tells its allies that after two more months, it will be unable to continue operations in Somalia, as the forces are needed elsewhere. The UN and African Union (AU) ask that the EU neutralise the jihadists in Somalia, sufficient to restore AMISOM and the Somali government to resume stabilising the country.

The country is almost completely under control of jihadi forces. Al-Shabaab's main effort is besieging Mogadishu. It has about 7,500 fighters. The north of Somalia is under the control of about 3,000 ISIS fighters. The area south of Mogadishu is under the control of about 4,000 al-Qaeda fighters.

All three groups comprise determined fighters, buoyed by their recent victories. They are highly mobile, using a mixture of technical and captured light armoured vehicles. Air defence is limited to anti-aircraft artillery (AAA) and some man-portable air-defence systems (MANPADS). Their command and control is decentralised. Although al-Shabaab considers itself the first amongst equals, in practice there is much rivalry and little coordination between the three groups. All have implemented a harsh rule over those civilians who remain in the areas they control.

A brigade-sized force of Somali government troops is holding a perimeter in Mogadishu, but is highly dependent on the presence of US SOF, a battalion of US Marines and US airstrikes and naval-gun support. The port and airport have been badly damaged by jihadi rocket fire, so the lodgement depends on an offshore US amphibious force for logistics and military and civilian-casualty evacuation.

Other Somali government forces consist of a brigade-sized force recuperating in northern Kenya. It is badly battered, but keen to recover its country. Morale is fragile.

Kenya offers to lead a multinational brigade comprised of contingents from AMISOM troop-contributing nations. Provided this receives training and logistic support necessary to restore its combat capabilities, it will be ready for operations after six months of preparation. Other AU states indicate that they will be willing to provide contingents to AMISOM, but only once Mogadishu is secured and a land line of communication is opened from Kenya to the capital.

EUFOR–HOA

The UN Security Council authorises the EU force to 'use all necessary means to restore government control over Mogadishu, neutralise jihadi groups and assist the rebuilding of AMISOM and Somali government forces,

to allow the government and a reconstituted AMISOM to restore Somali government authority over the country'. The EU Military Committee assigns the mission to EUFOR Horn of Africa (EUFOR–HOA).

Access, basing and overflight

- Sudan and South Sudan, and Ethiopia and Eritrea, are preoccupied with bilateral tensions and cannot assist. Egypt and Saudi Arabia offer overflight but not basing. Yemen is still a contested war zone.
- Djibouti, Kenya, Oman and Uganda offer access, basing and overflight; other AU members offer overflight rights.

EU Military Committee-endorsed concept of operations

The previous transition strategy planned by the UN has failed. The new mandate requires both neutralisation of the jihadi threats to Kenya and Mogadishu and the restoration of the Somali and AMISOM security forces' capabilities and confidence to continue the stabilisation of the country. The EU has pledged financial assistance and military aid to the Somali government forces and AMISOM. There will be a complementary civilian-led EU reconstruction mission. Both missions are planned to last two years.

Overall force requirements for command and control

HQ EUFOR–HOA is to be an EU-led three-star CJTF. Initially deploying to Kenya, it would subsequently move to Mogadishu. It is to have maritime, air and SOF components and a rear support command. The land component is the supported component and requires a combined-arms division of an air-assault/airborne brigade, a mechanised brigade and an amphibious brigade.

The mission

This will consist of three phases:

1. Protection of the Somali government enclaves in Mogadishu and Kenya's border with Somalia; an initial capability is to be deployed to Kenya and Mogadishu by D Day.
2. From D+30, offensive operations by EUFOR–HOA to neutralise jihadi forces threatening Mogadishu and to reopen the line of communication from Kenya. Concurrent provision of training, advice and assistance to Somali government forces in Mogadishu and Kenya and the Kenyan-led AMISOM brigade. It is envisaged that this phase could last up to six months.
3. Subsequently continuing to build the capability and confidence of AMISOM and Somali government forces through training, advice and assistance, while extending the areas under government control. This phase could last up to 18 months, by which time security leadership would return to the Somali government.

Commander EUFOR–HOA initial concept of operations to guide planning

Phase 1: preliminary operations, D-30 to D Day

As soon as possible:

- Leading elements of the two EU Battlegroups and the HQ of the mechanised brigade deploy by air to Kenya, to assist and reassure Kenyan forces defending their border with Somalia.
- Operational reconnaissance and liaison teams deploy to Nairobi, Djibouti, HQ CENTCOM and to the HQ of US forces in Mogadishu. HQ EUFOR–HOA deploys to Kenya.
- Air, SOF and ISR assets begin deploying to theatre.
- Establish necessary sea, air and land lines of communication. The maritime component is required to protect the SLOC from any threats from Yemen.

By D+30, the force is ready to begin operations as follows:

- US forces in Mogadishu have been relieved by the EUFOR–HOA amphibious task force and a security force assistance battalion is working with the Somali brigade.
- The air-assault brigade and mechanised brigade have deployed to Kenya, ready to begin offensive operations between Kenya and Mogadishu.
- The maritime component is ready to provide naval gunfire support in that same area, and to conduct battalion-sized littoral manoeuvre.
- SOF are ready to attack key jihadi C2 nodes in depth.

- The security force assistance task force has begun training, assisting and advising AMISOM and Somali National Army forces in Kenya, in order to reintroduce them to Somalia from D+90.

Phase 2: From D+30

For the first 90 days the force will concentrate on Mogadishu and south Somalia. The amphibious force in conjunction with Somali forces is to break the siege of Mogadishu and push jihadi forces beyond rocket range of the city. This is the main effort. Mogadishu airport is to be used to base helicopters, UAVs and short take-off and vertical landing (STOVL) fighters, and Mogadishu port is to be reopened to civilian and military vessels.

Once this is complete, the main effort switches to an advance by the mechanised brigade to open the route from Kenya to Mogadishu. The air-assault brigade is to support this with air manoeuvre (up to battalion strength), while the rest of the brigade acts as force reserve. Once the route to Mogadishu is cleared and secured, EUFOR–HOA will conduct follow-up operations to disrupt al-Shabaab in depth.

Phase 3

It is anticipated that the Kenyan-led AMISOM brigade and Somali National Army brigade will be operational six months from the operation's launch, with embedded advisers and mentors. EUFOR–HOA will carefully introduce both brigades into operations. Other AU forces will then deploy to Somalia, while EUFOR–HOA both disrupts al-Shabaab and trains assists and advises Somali government forces. EUFOR–HOA is planned to withdraw after two years.

Combined Joint Statement of Requirement

Command and control

A three-star CJTF HQ to initially deploy to Kenya, but to be capable of moving to Mogadishu.

SOF component

A battalion-sized special operations force capable of operating anywhere in Somalia and of inserting itself by land and air, and of being inserted by the maritime component. To include organic transport aircraft, helicopters and manned ISR aircraft.

Land component outline

A combined-arms division with a HQ capable of commanding and supporting manoeuvre operations over extended distances. All forces to be capable of close combat against jihadi forces in open and urban terrain.

Land component force requirements

- Two EU Battlegroups to deploy rapidly to Kenya to assist with security of Kenya–Somalia border.
- A mechanised brigade, capable of moving rapidly and sustaining operations over long distances. To incorporate the EU Battlegroups.
- An amphibious brigade.
- An airborne brigade capable of inserting a battalion group at distance by either parachute, tactical air landing or helicopter.
- A brigade-sized security-assistance force capable of training, advising and assisting the Kenyan AMISOM brigade and the two remaining Somali brigades, both in reconstituting their capabilities and in accompanying them on operations.
- Helicopters. The force requires the equivalent of a battalion each of attack, medium-lift and heavy-lift helicopters. This can include the amphibious forces' organic aircraft.
- Engineer brigade. Sufficient military bridging is required to operate two military ferries across the major rivers of south Somalia and to replace them with fixed lines of communication bridges. Required battalion of M3 ferries (or equivalent), followed by bridging battalion. Also requires counter-IED battalion-sized task force.
- Combat support. Brigades are to have integral artillery, engineers and logistics. The division also requires battalion-sized task forces with the following capabilities: electronic warfare (EW)/signals intelligence (SIGINT), tactical UAVs, CIMIC, information operations, and precision deep attack (guided multiple-launch rocket system (MLRS) or equivalent).
- Port and airport operations. The division requires the ability to reopen Mogadishu airport and

operate tactical landing strips for resupply and casualty evacuation. The division must also open and operate Mogadishu's docks.

- Hospitals are to be established in Kenya and some kept afloat with the amphibious task force.

Maritime component outline

An afloat two-star maritime component and amphibious force headquarters. An aircraft carrier group with enhanced escort screen for self-protection and to detach units for naval gunfire support. An amphibious group to support a brigade-sized amphibious landing force and maritime-based special operations forces. A surface-action group to accompany sealift shipping for landing force for southern Red Sea/Bab el-Mandeb transit. A submarine component for self-protection, maritime-based ISR; land attack (in initial phase); and SOF insertion. Mine countermeasures forces sufficient for southern Red Sea/Bab el-Mandeb transit and to support reopening and operations of Mogadishu port. Sufficient reserve of surface combatants to sustain ante bellum World Food Programme (WFP) escort requirements. Unit rotation at six months.

Maritime component assumptions

- Maritime threat level in the southern Red Sea and Bab el-Mandeb Strait requires enhanced force protection for deployed naval forces, sea-based logistic support chain for land force.
- EU *Operation Atalanta* counter-piracy mission mandate remains operative, and the situation on the ground in Somalia is likely to see resurgence of piracy activity.
- Lack of sufficient host-nation support for air basing close to operating area means significant aircraft carrier contribution needed to initial air component requirement, up to D+60.
- Submarine-based land-attack capability up to D+60.
- Intelligence-based warnings of possible proliferation of coastal anti-ship missiles into Somalia.

Maritime component force requirement

- One afloat two-star maritime component and amphibious force headquarters
- Brigade-sized amphibious landing force
  - Amphibious assault ship (LHD) for close air support, amphibious helicopter lift, and combat search and rescue
  - Two landing platform docks (LPDs), including with command-ship capability
  - One landing ship dock (LSD) for amphibious support, and to support MCMV force and port operations
- One aircraft carrier (CV)
- 12 principal surface combatants
- Two SSNs for carrier protection, land attack, ISR and SOF insertion
- One attack submarine with anti-submarine warfare capability (SSK), for ISR and SOF insertion
- Eight MCMVs
- Fleet replenishment oiler with hangar (AORH)
- One primary casualty evacuation or hospital ship.

Air component assumptions

Basing will be at Djibouti and Nanyuki (Kenya) and with STOVL fighter aircraft initially at sea, but coming ashore to Mogadishu airport once secure. HQ will be at Djibouti. Unit rotation at six months.

Air component force requirement

- 32 ground-attack aircraft
- Six STOVL ground-attack aircraft
- Eight tankers
- Strategic airlift for deployment and sustainment of airbridge by C-17 and A400M aircraft
- In-theatre transport once force at steady state: six C-130s and six C-27s – up to 20 parachute-trained and -equipped C-130s or A400Ms are required if battalion is to be delivered by parachute
- Two radar ground-surveillance aircraft
- Two SIGINT aircraft
- Six combat ISR UAVs – *Reaper*/armed *Predator* or equivalent to generate two orbits
- Three heavy ISR UAVs – *Predator* or equivalent – to generate one orbit.

Map 3.2: **EU stabilisation and support to capacity-building mission in the Horn of Africa**

		LAND	AIR	NAVAL
CAPABILITY ASSESSMENT (EU 28)	**SHORTFALL**	• Information operations • Civil–military cooperation (CIMIC) • Explosive ordnance disposal (EOD) • Medical • Intelligence, surveillance and reconnaissance (ISR) • Amphibious	• Heavy transport helicopter • Electronic-intelligence aircraft • Tanker aircraft • Signals intelligence aircraft • Combat ISR (CISR) uninhabited aerial vehicle (UAV)	• Aircraft carriers • Principal amphibious ships • Nuclear submarines
	ADEQUATE	• Airborne • Mechanised • Logistics	• Medium transport aircraft • Attack helicopter • Heavy transport aircraft • ISR aircraft	• Surface combatants • Replenishment vessels
	MORE AVAILABLE	• Signals • Engineer • Artillery	• Light transport aircraft • Medium transport helicopter • ISR UAV • Fighter ground-attack aircraft	• Mine countermeasures • Conventional submarines
EU 27	**ADDITIONAL SHORTFALLS IF UK NOT INCLUDED**	• None	• Heavy transport aircraft • ISR aircraft	• Surface combatants • Replenishment vessels

3.3: Conflict prevention and counter-piracy mission in the Red Sea and Indian Ocean

Scenario

It is 1 January 2020. Piracy has re-emerged as a major threat to shipping in the Indian Ocean and the Red Sea. Overspill from the war in Yemen is threatening the shipping using the Bab el-Mandeb Strait. With the withdrawal of Chinese and US forces from international maritime-security missions, an EU force is to counter these threats.

The South China Sea has become an area of considerable competition between the US and China. Acrimonious breakdown of negotiations between the US and the Democratic People's Republic of Korea (DPRK) has led to greatly increased tensions with the US and Japan. Relations between the US and Iran have also deteriorated. The US informs its allies that these challenges require greatly increased US Navy forward presence in the South and East China seas, the Gulf and Strait of Hormuz. US warships and aircraft will no longer be available for maritime security and counter piracy in the Indian Ocean and Red Sea. China also withdraws its warships escorting ships bringing WFP food aid into Mogadishu.

The war in Yemen continues, with the Saudi-led coalition unable to make progress against the Houthis or al-Qaeda and ISIS. The Houthis use anti-ship missiles and land and rocket artillery against warships transiting the Bab el-Mandeb. The famine in Yemen gets worse and there are indications that armed groups in Yemen are preparing to conduct piracy. Intelligence agencies are worried about al-Qaeda and ISIS in Yemen using piracy to generate revenue.

In Somalia, in early 2019, the planned transition of security responsibility from AMISOM to Somali government security forces goes badly. As AMISOM withdraws, al-Shabaab probes for weaknesses, inflicting casualties. The Somali forces are pushed back by a full-scale offensive. The US fails to intervene with air power or SOF, citing higher priorities elsewhere. A limited counter-attack by AMISOM blunts the al-Shabaab offensive and establishes a secure enclave comprising Mogadishu and surrounding areas within an 80 km radius. However, in most of the country the government's influence is greatly reduced. Al-Shabaab and local warlords are the prime actors outside the Mogadishu enclave. The AU's strategic confidence has been dented and it is likely to be some time before it has the capability and confidence to tackle al-Shabaab.

Somali criminal networks rapidly reconstitute themselves. Over the following months, piracy rapidly increases, with a wide range of ambitious and confident attacks carried out over wide areas of the Indian Ocean and Red Sea. The discovery of a yacht drifting between the Maldives and Seychelles, carrying the corpses of its crew, the technology billionaire who chartered it and his philanthropist wife causes a media furore, as does the posting on the internet of videos of captured ships' crew members being executed by pirates.

By the turn of the year, the regional piracy threat is assessed to be the most severe yet. The insurance industry applies war-risk premiums and shipping companies put pressure on European governments, making increasingly loud demands for naval forces to arrange convoys or to provide close escort from naval vessels. Navies and governments strongly advise that vessels resume implementing the 'best management' practices that were used during the previous piracy peak. The media questions whether Europe's previous anti-piracy mission was too soft on pirate networks. There are calls to 'be tough on piracy and tough on those who fund and facilitate piracy'.

The UN Security Council authorises the EU to deploy a force to counter piracy and other attacks on shipping. It is also to deter and prevent attacks on shipping by Houthi forces in Yemen and escort ships carrying WFP aid into Mogadishu. Force may be used to defend ships against attack and to attack identified pirates displaying hostile intent, including activity ashore such as preparing attacks, receiving and moving ransom money, and distributing contraband. The EU may also use force to rescue hostages in pirate hands. The area of operations is Somalia; the Indian Ocean south of Mumbai; west of the Maldives; and north of Seychelles and the Red Sea as far north as Jeddah (Saudi Arabia).

Access basing and overflight

Offered by Djibouti, India, Kenya, Madagascar, the Maldives, Oman and Seychelles. Operations in and over Somalia are permitted. Any operations and basing in Yemen, including Aden, will require permission from the Saudi-led military coalition.

EU Military Committee-endorsed concept of operations

EUFOR Indian Ocean (EUFOR–IO) is to restore maritime-security in the AO in order to allow the free flow of legitimate commercial shipping through the same area, and the flow of international aid into Mogadishu.

Phase 1

EUFOR–IO is to incorporate the existing *Operation Atalanta* and to rapidly respond to the deteriorating maritime-security situation and the withdrawal of US and Chinese warships by increasing the number of vessels, aircraft and boarding parties within the AO. The force is to achieve an initial operational capability within 60 days. It is to conduct an information operation to encourage ships to adopt best maritime practices as they transit across the AO.

Phase 2

Through a combination of deterrence, quick reaction and boarding operations, EUFOR–IO is to stop the increase in maritime-security incidents.

Phase 3

Through improved maritime-domain awareness and developing intelligence against pirate networks and infrastructure ashore, EUFOR–IO is to degrade pirate capabilities by conducting precision-strike operations against identified pirates displaying hostile intent. This includes preparing attacks, receiving and moving ransom money, and distributing contraband.

Phase 4

Once there has been an enduring reduction in piracy sufficient to trigger withdrawal of war-risk premiums by the maritime-insurance sector, EUFOR–IO should shift its effort to capacity-building and partnership of local and regional maritime-security forces. It is assumed that the mission will end at the two-year point.

Commander EUFOR–IO initial concept of operations to guide planning

Assumptions:

- EU *Operation Atalanta* two-star HQ remains in place in Rota (Spain). One-star forward HQ deployed afloat.
- Maritime industry requires accompanied passage for shipping through high-threat area of Gulf of Aden, Bab el-Mandeb Strait and southern Red Sea.
- Supporting port facilities available at Djibouti, Duqm (Oman), and Mombasa (Kenya).

The potential missile threat in the Bab el-Mandeb Strait/southern Red Sea will require the deployment of high-end surface combatants with capable anti-aircraft/anti-missile weapons systems. Counter-piracy requirements over the entire area of operations will require a minimum of six surface combatants with afloat support. A mine countermeasures force will also be required to deal with a potential sea-mine/maritime-IED threat in this area as well. A limited amphibious/littoral manoeuvre force is included to engage targets ashore. A submarine capability is required for offshore ISR and SOF insertion.

Statement of requirements

One-star afloat headquarters. Liaison parties at US Naval Forces Central Command (NAVCENT) Bahrain, Coalition HQ in Djibouti, Saudi-led coalition HQs at Riyadh and Aden. Airfields used: Djibouti, Gan (Maldives), Masirah (Oman) and Seychelles.

- One LHD
- One LPD with additional amphibious-boats equipment for possible SOF insertion
- Marine infantry battalion; HQ and two companies embarked force
- 16 destroyers with anti-ship missiles, hangar, surface-to-air missiles (DDGHMs) or fire-fighting frigates with anti-ship missiles, with hangar, with surface-to-air missiles (FFGHM)
- Four MCMVs
- Two SSK
- Two AORH
- Two SIGINT aircraft
- Two multipurpose ISR aircraft
- 17 maritime-patrol aircraft (MPA)
- Ten anti-surface warfare/anti-submarine warfare helicopters
- Ten AW159 *Wildcat*s/AS565 *Panther*s
- Six attack helicopters
- Eight amphibious support helicopters
- Battalion-sized special operations task force, optimised for coastal operations and hostage rescue.

Map 3.3: **Conflict prevention and counter-piracy mission in the Red Sea and Indian Ocean**

		LAND	AIR	NAVAL
CAPABILITY ASSESSMENT (EU 28)	**SHORTFALL**	• None	• Maritime-patrol aircraft • Signals-intelligence aircraft	• Principal amphibious ships • Surface combatants
	ADEQUATE	• Amphibious	• Intelligence, surveillance and reconnaissance (ISR) aircraft	• Replenishment vessels
	MORE AVAILABLE	• Special-operations forces	• Anti-surface/anti-submarine warfare helicopter • Medium transport helicopters • Attack helicopter	• Mine countermeasures • Conventional submarines
EU 27	**ADDITIONAL SHORTFALLS IF UK NOT INCLUDED**	• None	• ISR aircraft	• None

3.4: Support to humanitarian assistance mission in Bangladesh

Scenario

It is 1 September 2020. The worst floods in Bangladesh since records began have created a humanitarian crisis of unprecedented scale. The EU is mounting a military mission to assist humanitarian and disaster-relief efforts.

Two-thirds of Bangladesh is low-lying flood plains. Most of this is densely populated. Despite the construction of artificial barriers against Indian Ocean storm surges, the country is very vulnerable to floods resulting from Indian Ocean cyclones, monsoon rains and meltwater from Himalayan glaciers, either singly or in combination. The most severe flood in recent times was in 1998 when 100,000 km² were inundated – 68% of the land area. There were over 1,000 deaths, a lower number than the 2,600 deaths reported in the slightly less severe floods of 1988. Major floods usually result in a subsequent health crisis, as hospitals are damaged or closed, resulting in difficulties in treating injured people. Contaminated floodwater also spreads disease. In addition, floods depress the country's economy.

Late August 2020 sees the worst floods yet across Bangladesh, the Himalayas and northeast India. Approximately 75% of Bangladesh is flooded. There are severe mudslides in southeast Bangladesh. These greatly damage the refugee camps holding Rohingya refugees who have fled from Myanmar. Bangladeshi civilian and military disaster-response efforts are overwhelmed by the unprecedented scale of the floods. Food distribution breaks down and widespread malnutrition in rural areas is predicted. India is dealing with the aftermath of record floods in the region surrounding Bangladesh and is unable to send assistance.

Bangladesh appeals to the international community for urgent assistance with humanitarian relief and disaster recovery. The EU agrees to send a military mission to assist. It is to achieve initial operating capability within ten days and to last up to three months. It will be replaced by an EU civilian reconstruction mission.

India agrees to provide basing, fuel and overflight. Most Bangladeshi airfields are damaged to a greater or lesser degree. Fuel is available in India. The commander and key staff of the EU mission HQ flies to the country. After some difficulty they reach Dhaka, half of which is underwater.

Commanders' assessment and concept of operations – extract from email sent to Chairman of the EU Military Committee

This flood is worse than any since records began. Bangladeshi government and armed forces emergency-management organisations have been overwhelmed. Movement of personnel and aid around the country has been disrupted, not only by the floods, but also by the damaging and sweeping away of a high proportion of the bridges, ferries and boats that are crucial to the country's transport infrastructure. The country's small fleet of helicopters is unable to meet more than a fraction of essential tasks.

There is no doubt that Bangladesh will eventually recover, but this time the damage to its economy and public health will be greater than ever before. The civilian and military authorities in Dhaka say that EUFOR can best assist by providing capabilities that would act as enablers and force multipliers to the Bangladeshi civilian and military authorities in their disaster-relief and reconstruction efforts. I assess that there are three areas where EUFOR could help:

- Distribution of emergency-relief aid to places the Bangladeshis are having difficulty reaching.
- Rapid deployment of Bangladeshi civilian and military personnel by helicopter.
- Counsel and expertise from military experts, particularly engineers and medical staff.

I assess that the best way to do this is to set up a forward operating base (FOB) at an airfield in Bangladesh or a nearby region in India. From here, EUFOR can operate helicopters flown in by strategic airlift and assemble vast quantities of emergency food aid to be delivered by airdrop and helicopter. We will need an air component HQ to coordinate both fixed- and rotary-wing staff and sufficient fixed- and rotary-wing logistic and maintenance personnel to sustain a high tempo of operations. We also need a reconstruction task force HQ. This would best be based in an engineer- or logistic-brigade HQ.

Given Bangladesh's large army, there is no need for an EU manoeuvre brigade. Helicopters and specialists will make the necessary difference. The force requirement is as follows:

- Ten air-transport aircraft providing one sortie per day. Initially C-17s and A400M to rapidly deploy C2, essential personnel and helicopters. Switching to A400M and C-130 for airdrop operations.
- Ten helicopters. The larger the better: CH-47, CH53 or *Merlin*.
- Ground-control parties to coordinate the air delivery of supplies with Bangladeshi authorities on the ground.
- A reconstruction task force HQ commanding engineer, medical and logistic specialists. Up to 200 people.

The Bangladeshi authorities would also greatly appreciate a more sustained longer-term military effort. They have reminded us that the international response to the 1991 Indian Ocean cyclone floods included a US Marine Expeditionary Unit and a UK amphibious ship carrying *Sea King* helicopters. They could use many more helicopter sorties over the next few months, as well as more medical and engineering advice and assistance. The US have despatched the Indo-Pacific Command Marine Expeditionary Unit for precisely these roles.

Any suitable warships from EU nations that are deployed in the Gulf, Indian Ocean or Southeast Asia could be sent to join EUFOR as quickly as possible.

If the EU were to send a tailored amphibious force to Bangladesh, this would provide a secure platform from which to operate medium- and heavy-lift helicopters to assist with reconstruction. It could also carry substantial numbers of medical specialists, combat engineers and their equipment.

Although damaged by the floods, Bangladesh has an extensive network of rivers. Moving personnel, equipment and supplies by water will be much more cost-effective than using scarce aircraft. EU forces have many landing craft, hovercraft and small-boat units. Could these also be despatched with the amphibious task force?

Deploying such a force would add momentum to the Bangladeshi relief effort over the next few months, until EUFOR is relieved by a civilian mission in three months' time. It would also give the EU positive influence in Bangladesh and, more widely, South Asia.

If a decision is taken now and 3–5 days allowed for force preparation, followed by 17 days' sailing time, such a force could be off Bangladesh by D+22. This force would concentrate on assisting southern Bangladesh, allowing the air-component supply drops to concentrate on northern Bangladesh. Operating for the final two months of the mission, such a force would considerably increase the overall impact of the EU operation and accelerate Bangladesh's reconstruction. The potential maritime force requirement for EUFOR is as follows:

- An amphibious task force HQ
- Two squadrons medium/heavy transport helicopters
- One engineer battalion
- One medical battalion
- Two LHD/landing ship assault (LHA)/CVs
- One LPD
- One LSD
- Amphibious craft including landing craft, small boats and hovercraft
- One aviation training ship with additional primary casualty evacuation role.

Map 3.4: **Support to humanitarian assistance mission in Bangladesh**

		LAND	AIR	NAVAL
CAPABILITY ASSESSMENT (EU 28)	**SHORTFALL**	• None	• None	• None
	ADEQUATE	• None	• None	• Aircraft carriers • Principal amphibious ships
	MORE AVAILABLE	• Medical • Engineer	• Heavy transport aircraft • Medium transport aircraft • Heavy transport helicopter • Medium transport helicopter	• Replenishment vessels
EU 27	**ADDITIONAL SHORTFALLS IF UK NOT INCLUDED**	• None	• None	• Aircraft carriers

3.5: Rescue and evacuation mission in South Africa

Scenario

It is March 2020. Aggravated racial tensions have caused security in South Africa to deteriorate beyond government control. The EU is to mount a rescue and evacuation operation to take EU citizens to safety.

South African government statistics show approximately 20,000 European citizens are registered as long-term visitors to the country. In any month, there are around 10,000 European citizens visiting the country as tourists. The greatest number of European tourists come from: UK (13%); the Netherlands (9%); Germany (7%); France (6%); and Belgium (3%). These statistics broadly reflect the proportion of citizens of different nations who are long-term registered visitors.

Since 1994, it has been a priority for the ruling African National Congress (ANC) party to redistribute arable land from white ownership to black ownership. Until 2018, government policy was to do this via land restitution and the 'willing buyer, willing seller' model – voluntary sales of land by white farmers. Land remains largely under white ownership with only 10% transferred to black ownership. Calls for land expropriation without compensation (EWC) grew louder but were resisted by moderates who recognised the potential economic fallout from such a course of action. In February 2018, then-president Jacob Zuma was forced from office and replaced by Cyril Ramaphosa. This amplified divisions within the ANC between pro-Zuma populists and the pro-Ramaphosa moderates. In an apparent attempt to win over the populists in the ANC, Ramaphosa pledged to change the constitution to allow the state to pursue EWC. He also established a land-reform advisory panel to offer solutions that would both redistribute land and increase food production.

In March 2019, the panel issues its report, advising that only unused tracts of land should be eligible for expropriation. With any major transfer of land from white to black ownership unlikely, there is strong opposition to the proposals among ANC populists, the Economic Freedom Fighters (EFF) and other activists. Ramaphosa is accused of siding with white landowners. Eying the forthcoming general election, the EFF increases its direct action with land invasions, building shacks on the land of white farmers. The government responds in stumbling fashion – caught between the pledge not to tolerate land invasions and the political risks of being seen to protect white farmers from black activists. The lead-up to the election is marked by sporadic clashes between the police and land invaders, and violent protests due to spiralling unemployment. The ANC wins the election, although voter turnout is low due to disillusionment caused by the political climate.

As land invasions continue, radicals increasingly engage in the sabotage of white-owned farms. With violence rapidly increasing, some white farmers hire armed private-security personnel to protect their land. International investors are alarmed by the violence; the rand falls in value; white farmers cease to invest in their own farms; and the country's economic difficulties rapidly worsen. The degrading economic situation only amplifies public discontent.

In late 2019, a private security company's armed guards detain and brutally torture a land invader. He dies of his wounds. Mobile phone footage of the incident rapidly spreads across the internet, sparking further tension. Violent protests multiply, inflamed by the arrival in South Africa of uninvited groups of white supremacists from the US, associating themselves with white farmers. Vigilantism spreads and groups of radicals on both sides begin direct acts of violence against one another, often posting mobile phone footage of such activity on the internet. This self-sustaining cycle of racial violence is amplified by social media. Disorder rapidly increases and opportunistic criminal violence surges, with armed looting of white-owned businesses escalating. The South African police cannot contain the violence and disorder on its own. The army is mobilised to assist, but despite the declaration of a state of emergency, the security forces struggle to contain the disorder.

Carjacking surges and the streets are no longer safe. Outside Johannesburg, a group of European airline staff are brutally murdered, their mutilated bodies dumped on the airport approach road. Mobile-phone footage of the death of a pilot and stewardess at the hands of a violent mob rapidly spreads across the internet. International airlines suspend their flights to and from South Africa. Incapable of conducting or protecting the

evacuation of foreign citizens, the South African government accepts a EU proposal for a military evacuation of foreign citizens.

EU Action with UK in the lead

Given that the number of European citizens at risk is greatest for the UK, the EU Military Committee invites London to task the British High Commission in Pretoria to act as 'consular lead'. London accepts and deploys its Joint Task Force HQ to the region, and operational liaison teams to the British High Commission, the South African military and police HQs.

The EU determines that the state authorities of South Africa are incapable of protecting EU citizens in the country. EU member states have a right to exercise individual or collective national self-defence under international law, in respect of their own nationals at risk of death or serious harm in a foreign state where the state authorities involved are incapable of protecting them; Article 51 of the UN Charter therefore applies. This right will be exercised by an EU force, which has the right to use force in self-defence, and for the defence of EU citizens at risk.

EU Military Committee-endorsed concept of operations

Given the deteriorating security situation, the evacuations need to begin as soon as possible, and certainly no later than ten days from now (around D-10). Given the size of the country, the operation should be planned to last up to three months.

The EUFOR commander proposes that, where possible, EU citizens should assemble at reception centres at embassies and consulates. From there, they will need to move by road to evacuation points at local airfields or international airports for flight in military aircraft to a forward mounting base (FMB) that will be established at Gaborone (Botswana). This will see them transferred to chartered civilian aircraft for flights back to Europe.

Given the disorder in the country and the likely reaction to a perceived 'fleeing' of white people, flights in and out of the country will take place at night. It will be necessary to protect the airfields and provide immediate medical facilities at the evacuation points. This will require troops at approximately company strength.

Should it not be possible for evacuees to move safely by road from reception centres to evacuation points, it may be necessary to organise convoys with protection provided by military escorts.

Commander's statement of requirements

Command and control

A CJTF HQ deployed to the FMB. This commands all assigned EU military units and establishes and leads a multinational non-combatant evacuation operation coordinating cell (NEOCC) for coordination of the EU operation with those of other nations evacuating their nationals. The air, land and SOF component HQ collocate.

Air component

Sufficient airlift to evacuate simultaneously from up to six airfields a night. Tactical control parties sufficient to operate airfields independently at night. Initial selected evacuation airfields in South Africa: Cape Town, Durban and Johannesburg airports, and Overberg Military Test Range. In addition:

- Five C-130s or A400Ms
- Five A330 MRTTs or C-17s.

Land component

An airborne brigade trained and equipped to support evacuation operations by air. To be capable of deploying up to six company-sized groups to secure airfields; assist the evacuees (including provision of first aid at the evacuation points and second-line medical support at the FMB); and, if required, provide ground-convoy escorts. To receive and assist the evacuees at the FMB and support consular staff. To hold an airborne battalion in reserve.

Special Operations Forces

A battalion-sized SOF element, prepared to deploy to at-risk embassies and consulates and able to locate isolated groups of EU citizens at distance. To be prepared to rescue any EU citizens that may be kidnapped or illegally detained. To deploy with its own airlift, transport aircraft and vehicles.

Potential maritime component

Evacuation by air is feasible, provided that the level of disorder does not surpass EUFOR's ability to secure the airfields used for evacuation and, if necessary, provide escorts for convoys of evacuees to the airports. Should the situation in the country further deteriorate, an additional capability to evacuate by sea would provide more options.

For these reasons it is recommended that any EU naval vessels within ten days' sailing time of South Africa immediately move to the area. These will be able to complement the air operation in evacuating isolated refugees. A maritime component would allow evacuations for coastal cities and towns. Helicopters with marine protection parties could evacuate people up to 300 km from the sea.

Hence, it is recommended that the EU assign a maritime component. If a decision were taken now, allowing for five days' loading and 13–15 days' transit time, this could reach Cape Town between D+18 and D+20. Force requirement for the maritime component is as follows:

- Embarked one-star amphibious task group HQ
- One LHD
- One LPD
- Amphibious craft, including landing craft and boats
- Two DDGHMs/FFGHMs
- 12 embarked amphibious helicopters
- Battalion of marines.

Map 3.5: **Rescue and evacuation mission in South Africa**

		LAND	AIR	NAVAL
CAPABILITY ASSESSMENT (EU 28)	**SHORTFALL**	• None	• None	• None
	ADEQUATE	• None	• None	• None
	MORE AVAILABLE	• Amphibious • Special-operations forces • Airborne	• Medium transport aircraft • Medium transport helicopters • Heavy transport aircraft	• Principal amphibious ship • Surface combatants
EU 27	**ADDITIONAL SHORTFALLS IF UK NOT INCLUDED**	• None	• None	• None

4. Not just one thing at a time: the impact of concurrency

The European Union's military level of ambition assumes that EU member states will have to take on more than one operation at a time. Both the many security challenges and potential crisis situations around the globe, and the reality of operations since the CSDP was launched, support this assumption. Naturally, the concurrency possibility generates force requirements that are above those of each individual scenario.

This study explores five types of operations, which result in a large number of possible combinations. Out of these theoretically plausible combinations, we have chosen two concurrency suites of very different character to assess and illustrate the ability of EU member states to meet the agreed ambition. Our assumptions about simultaneous operations are explicitly not meant to be a prediction of what is likely to occur. They are intended to generate force requirements that are located at the upper end of what the EU and its member states want to be able to achieve. Therefore, while the first set of simultaneous operations combines one major operation with a smaller operation, the second combines a larger number of smaller operations:

- Concurrency suite one: one peace-enforcement (PE) operation plus one rescue and evacuation (RE) operation.
- Concurrency suite two: two conflict-prevention (CP) operations; two operations for stabilisation and support to capacity-building (SSCB); one operation for support to humanitarian assistance (SHA); plus one RE operation.[1]

For the first concurrency suite, notable capability shortfalls emerge in the land, naval and air domains when all EU member states and the United Kingdom are included (EU 28). If the UK were to not contribute (EU 27), additional shortfalls would arise in notable enabling capability areas such as amphibious capability, special-operations forces, signals and nuclear submarines. In the air domain, EU member states lack combat uninhabited aerial vehicles (UAVs) and intelligence, surveillance and reconnaissance (ISR) aircraft even if the UK is included. In addition, important enablers such as heavy transport aircraft, electronic-warfare aircraft and tanker aircraft will also be in short supply. In the naval domain, shortfalls in high-end capability emerge: aircraft carriers, principal amphibious ships and, for the EU 27, nuclear submarines.

Some of the capability shortfalls identified in concurrency suite one are likely to be addressed by European governments in the coming decade. For example, several EU member states are in the process of acquiring ISR UAVs that are either armed or can be armed, either through off-the-shelf purchases from the United States and Israel or through development programmes. In the land domain, it might be possible to substitute some of the required specialised forces with forces that

Table 4.1: **Concurrency scenarios and assumptions**

Scenario	Assumptions	Concurrency suite 1	Concurrency suite 2
Peace enforcement (PE)	Response time: 60 days Duration: One year	Yes	No
Conflict prevention (CP)	Response time: 60 days Duration: Two years	No	Yes (2x)
Stabilisation and support to capacity building (SSCB)	Response time: 60 days Duration: Two years	No	Yes (2x)
Support to humanitarian assistance (SHA)	Response time: Ten days Duration: Three months	No	Yes
Rescue and evacuation (RE)	Response time: Ten days Duration: Three months	Yes	Yes

nominally have different roles but might nevertheless have the requisite relevant operational experience due to the previous two decades of stabilisation or counter-insurgency operations.

Generating sufficient command capabilities for the land component of this concurrency suite is more difficult. The PE scenario included in concurrency suite one requires two corps headquarters (HQ), six division HQs and a number of brigade-level command staff. Europe would lack brigade-sized formations and its 'natural' command structure in the land capabilities of military police, civil–military cooperation (CIMIC), explosive ordnance disposal (EOD) and information operations. Although the EU has a sufficient number of division HQs to cover concurrency suite one, readiness for deployment would likely be problematic. Moreover, the Eurocorps HQ is the only multinational headquarters staffed entirely by Europeans. Given that this concurrency requires two corps HQ, this would not suffice. The use of national corps HQs (available in France, Greece and the UK) might offer a supplement to achieve the required HQ capabilities – at least on this level.

Lastly, the same constraints apply to a joint forces HQ (one in the UK and a multinational one in Ulm, Germany), a joint logistics HQ (presumably only one in the UK) and the related maritime (one each in France, the UK, Spain and Italy), air and special-operations forces HQs. These problems underline the magnitude of integration of larger national command capabilities in NATO, leaving very few purely European command capabilities. Similarly, they underline the dependency of smaller EU member states on larger member states that might have retained such structures independently (e.g., the UK and France). This presents a political difficulty; the creation of European command structures is one of the most sensitive topics in future relations between the EU and NATO.

Concurrence suite one therefore demonstrates that, even under optimistic assumptions where some of the specialised land-force roles are being substituted, the EU 28 would struggle to meet the requirements of running PE and RE operations simultaneously. The UK would provide important enabling and high-end capabilities – if it is not in the force pool, meeting the level of ambition will be very hard indeed.

The second concurrency suite, combining a higher number of smaller operations of longer duration, is simply beyond the reach of EU member states. There are extensive capability gaps across all domains and often less than one-third of the force requirement would be met. Falling under one-third of the force requirement highlights the fact that the EU member states would not even be able to conduct this concurrency suite for a shorter duration without a demand for rotation. EU

Table 4.2: **Concurrency suite one capabilities and shortfalls**

		CAPABILITY ASSESSMENT EU 28 FOR CONCURRENCY SUITE ONE			EU 27
		Shortfall	**Adequate**	**More available**	**Additional shortfalls if UK not included**
Domain	Land	■ Information operations ■ Civil–military cooperation (CIMIC) ■ Explosive ordnance disposal (EOD) ■ Military police ■ Medical ■ Intelligence, surveillance and reconnaissance (ISR)	■ Amphibious ■ Airborne ■ Special-operations Forces ■ Signals ■ Mechanised ■ Logistics ■ Engineer ■ Reconnaissance	■ Air defence ■ Artillery ■ Armoured	■ Signals ■ Mechanised ■ Amphibious ■ Special-operations forces
	Air	■ Combat ISR (CISR) uninhabited aerial vehicle (UAV) ■ ISR aircraft ■ Heavy transport aircraft ■ Electronic-warfare aircraft ■ Tanker aircraft	■ Medium transport aircraft ■ Heavy transport helicopter ■ Attack helicopter ■ Fighter ground-attack aircraft	■ Medium transport helicopter ■ ISR UAV	■ None
	Naval	■ Aircraft carriers ■ Principal amphibious ships	■ Surface combatants ■ Nuclear submarines	■ Mine countermeasures ■ Replenishment vessels	■ Nuclear submarines

member states, even with the UK included, lack the military capability to sustain operations of this size and frequency. Removing the UK from the picture renders a bad situation much worse, especially in the maritime domain.[2] This does not signify that additional shortfalls would arise – hardly any force requirement in this concurrency suite would be met by the EU 28, after all – but existing shortfalls would be even more pronounced. Moreover, if existing procurement programmes are taken to add to existing capabilities rather than replacing them, they still do not significantly alter this situation.

If EU member states decide to engage in operations resembling concurrency suite two, they would very quickly require support from other actors. Simply extending the time that contingents are deployed in-theatre before they are rotated out again would not solve the problem, leaving aside the enormous toll this would take on personnel and materiel. It is likely that non-EU countries would contribute to at least some of the operations considered here, but the EU's level of ambition is to be able to conduct these operations without third-party involvement. Set against this standard, the EU is failing.

Table 4.3: Concurrency suite two capabilities and shortfalls

		CAPABILITY ASSESSMENT EU 28 FOR CONCURRENCY SUITE TWO			EU 27
		Shortfall	**Adequate**	**More available**	**Additional shortfalls if UK not included**
Domain	Land	■ Information Operations ■ Civil–military cooperation (CIMIC) ■ Explosive ordnance disposal (EOD) ■ Military Police ■ Medical ■ Intelligence, surveillance and reconnaissance (ISR) ■ Amphibious ■ Special-operations forces	■ Airborne ■ Air defence	■ Signals ■ Mechanised ■ Logistics ■ Engineer	■ None
	Air	■ Electronic-intelligence aircraft ■ Tanker aircraft ■ Maritime patrol aircraft ■ Combat ISR (CISR) uninhabited aerial vehicle (UAV) ■ ISR aircraft ■ Signals intelligence aircraft	■ Anti-surface warfare/ anti-submarine warfare helicopter ■ Medium transport aircraft ■ Fighter ground-attack aircraft	■ Light transport aircraft ■ Medium transport helicopter ■ ISR UAV ■ Attack helicopter	■ None
	Naval	■ Aircraft carriers ■ Mine countermeasures ■ Principal amphibious ships ■ Surface combatants ■ Nuclear submarines ■ Replenishment vessels ■ Conventional submarines	■ None	■ None	■ None

Notes

1 Where two operations of the same kind were required, we doubled the force requirement as defined in the relevant scenario (see section 3). Given the large number of plausible scenarios for these operations, it is of course possible that a contingency arises where, for example, two conflict-prevention operations will have to be conducted that are quite different in character and would thereby generate different force requirements.

2 This is in part a function of many of the scenarios used here, which have a significant maritime component. More land-centric scenarios would somewhat alter this picture.

5. Outlook to 2030

As the situation stands in 2018, European Union member states would struggle in significant ways if called upon to meet their agreed military level of ambition under the Common Security and Defence Policy (CSDP). Nevertheless, there are initiatives and procurements underway that can mitigate and in some cases eliminate the identified shortfalls, provided the level of ambition remains constant and is not revised upwards. However, projecting forward raises a number of challenging methodological issues. In trying to do so, we used the available information on assets in 2018 as a starting point. Then we added information from the IISS Military Balance+ database on planned and ongoing procurements up to 2030. We included signed contracts and also instances where a government has expressed a clear intention to procure equipment even if a contract has not yet been signed.[1]

A major constraint is that information on when equipment is meant to be phased out is not readily available in the public domain, at least not in a comprehensive way that could be compared across countries. Consequently, these projections assume that all current equipment stays in service and is complemented by the incoming assets. On top of this, governments often decide to extend the life cycle of equipment beyond their original intentions. Therefore, projections are liable to overestimate equipment holdings.

Despite these challenges and the necessary caveats that they create, it is possible to get a glimpse of the future. Given what we know about ongoing procurement activity, it is likely that the EU 27+UK (i.e., with the UK still cooperating with the EU) will be better equipped in 2030 to meet the force requirement of concurrency suite one (see Chapter 4) and the individual scenarios explored here. However, the naval- and air-capabilities increases will not suffice to meet the force requirements of concurrency suite one. Concurrency suite two will most likely remain out of reach for the EU 27+UK, even ten years from now, because it does not look as if the sustainability requirement – arising from the enduring nature of many of the operations and the necessary rotation of forces and equipment – will be met.

Substantive public-spending cuts over the last decade and the fact that the EU 27+UK is often already bound by costly procurement programmes (NH90, A400M) have hindered large procurement activities. To further close significant gaps for individual scenarios and to be better able to meet force requirements for simultaneous operations, several clusters of equipment types will need to be addressed. These include those which are in preparation as procurement projects, but it is yet unknown whether they will be available in 2030 and, if so, in what quantities. This would include, for example, the EuroMALE UAV (the European medium-altitude long-endurance uninhabited air vehicle) project as well as the Franco-German maritime-patrol aircraft project. More concrete information on these projects will help to sharpen the picture, and analyses like ours can inform decisions on what quantities should be procured. In addition, if a general trend towards off-the-shelf acquisitions emerges and solidifies, acquisitions that are not yet visible in the data might enter service before 2030.

There will probably remain a number of equipment gaps which are unlikely to be addressed by 2030, be it due to the long development and procurement lead time required, or that only very few large European states are likely to procure such items (e.g., principal amphibious ships), or simply because of the price tag they carry. Politically, multinational procurement processes, such as for the Multirole Tanker Transport (MRTT) aircraft fleet, might serve as an example to enable smaller EU member states to participate in the procurement of larger and more expensive equipment. Jointly operated equipment would be an important measure to share the financial burden among EU member states, rather than just relying on large member states for the provision of expensive items.

There are a number of capability areas that will remain problematic because there is, at this point, no identifiable procurement activity that would eliminate the shortfalls or compensate for the UK contribution. A rare exception might be electronic-intelligence aircraft, where significant procurement activity is planned.

Table 5.1: **Selected areas of likely capability shortfalls to 2030**

Scenario	Equipment	Status in 2030	Procurement activity
Peace enforcement (PE)	Combat intelligence, surveillance and reconnaissance (CISR) uninhabited aerial vehicles (UAV)	Shortfall, higher without UK	None
	Intelligence, surveillance and reconnaissance (ISR) aircraft (AC)	Shortfall, higher without UK	None
	Electronic-warfare aircraft	Shortfall	None
	Tanker aircraft	Shortfall, higher without UK	Some
	Aircraft carrier	Shortfall, higher without UK	None without UK*
Conflict prevention (CP)	Maritime patrol AC	Shortfall	Some
	Signals-intelligence (SIGINT) AC	Shortfall	None
	Principal amphibious ships	Shortfall, higher without UK	Some
Stabilisation and support to capacity-building (SSCB)	Electronic-intelligence (ELINT) AC	Shortfall, higher without UK	Significant increase likely
	Tanker AC	Shortfall, higher without UK	Significant increase likely
	CISR UAV	Shortfall, higher without UK	Some (quantities unclear)
	SIGINT AC	Shortfall	None
Support to humanitarian assistance (SHA)	Aircraft carrier	Shortfall, higher without UK	None without UK*
Concurrency suite one (PE+ rescue and evacuation (RE))	CISR UAV	Shortfall, higher without UK	None
	ISR AC	Shortfall, higher without UK	None
	Electronic-warfare aircraft	Shortfall	None
	Tanker aircraft	Shortfall, higher without UK	Some
	Aircraft carrier	Shortfall, higher without UK	None without UK*
	Principal amphibious ships	Shortfall, higher without UK	Some
Concurrency suite two (CPx2+SSCBx2+SHA+RE)	Medium transport aircraft	Shortfall, higher without UK	Some
	Heavy transport helicopter	Shortfall, higher without UK	Some
	Medium transport helicopter	Shortfall, higher without UK	Some
	ELINT AC	Shortfall, higher without UK	Some
	Attack helicopter	Shortfall, higher without UK	Some
	Tanker AC	Shortfall, higher without UK	Some
	Maritime patrol AC	Shortfall	Some
	CISR UAV	Shortfall, higher without UK	Some (quantities unclear)
	ISR AC	Shortfall, higher without UK	None
	SIGINT AC	Shortfall	None
	Aircraft carriers	Shortfall, higher without UK	None without UK*
	Mine countermeasures	Shortfall, higher without UK	Some
	Principal amphibious ships	Shortfall, higher without UK	Some
	Surface combatants	Shortfall, higher without UK	Some
	Conventional submarines	Shortfall	Some
	Nuclear submarines	Shortfall, higher without UK	Some
	Replenishment	Shortfall, higher without UK	None without UK

*Italy is procuring amphibious assault ships that will be able to carry aircraft.

For some equipment categories in which the EU 27+UK is likely to be able to meet force requirements in 2030, there is no indication of ongoing or planned procurement activity at this point. Ageing equipment, particularly in the air domain, will likely be more expensive to operate. This could affect light transport aircraft, medium transport aircraft, electronic-warfare (EW) aircraft and intelligence, surveillance and reconnaissance (ISR) aircraft, if one considers the quantities required across the different scenarios.

There are also a number of areas in which shortfalls do exist in 2018 that are likely to be eliminated by 2030. There are notable plans for additional surface combatants with the procurement of destroyers and frigates across the EU 27+UK, which have been delivered. Nuclear submarines will also receive a boon thanks to planned procurements in France and the UK.[2] The situation will also likely be less critical in 2030, with a total of five aircraft carriers projected in the EU 27+UK maritime capabilities. Inventories are likely to change where heavy transport helicopters are concerned: deliveries of CH-47F/D *Chinooks* in Greece, Italy and the Netherlands are to be completed, and there is the procurement of the yet-to-be determined heavy transport helicopter in Germany.

Notes

1 In the Military Balance+, these procurement activities are referred to as 'signed' and 'not yet signed' contracts. The collected information on procurement often contains information on the planned or confirmed start and end of the process. In such cases, we have evenly split the total number of ordered equipment across those years. The reality will be more varied, and as the actual delivery process is most likely not linear but will be executed in tranches or batches, projections generated this way are not precise predictions but reasonable estimates. Where the information on planned procurements did not provide a clearly identifiable end date, we assumed that orders will be delivered by 2030 at the latest.

2 Under the assumption that the *Astute*-class delivery is completed by 2030.

Annex

CONCURRENCY SUITE ONE: Rescue and evacuation (RE) and peace enforcement (PE) for one year duration

Table 1.1: **2018 Land**

Role	Quantity (EU 28)	Force requirement in battalion equivalent	Percentage of force requirement in battalion equivalent (33% deployability, incl. rotation)	Percentage of force requirement in battalion equivalent without UK (33% deployability, incl. rotation)
Information operations	0	3	0%	0%
Civil–military cooperation (CIMIC)	4	3	22%	22%
Explosive ordnance disposal (EOD)	5	3	28%	17%
Military police	10	6	28%	19%
Medical	15	3	83%	33%
Intelligence, surveillance and reconnaissance (ISR)	14	3	77%	22%
Amphibious	17	3	112%	99%
Special-operations forces	26	4	123%	94%
Airborne	33	6	121%	110%
Air defence	47	3	259%	242%
Signals	61	9	112%	86%
Mechanised	129	20	106%	100%
Logistics	102	9	187%	145%
Engineer	129	12	177%	154%
Aviation	1	3	6%	6%
Reconnaissance	66	9	121%	105%
Artillery	124	9	227%	207%
Armoured	128	9	235%	216%

Table 1.2: **2018 Maritime**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Aircraft carriers	3	1	52%	33%
Mine countermeasures	171	8	352%	323%
Principal amphibious ships	13	4	72%	61%
Surface combatants	123	13	170%	144%
Nuclear submarines	12	2	102%	50%
Replenishment	30	2	250%	190%

Table 1.3: **2018 Air**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Medium transport aircraft	206	18	219%	199%
Heavy transport helicopter	235	22	176%	131%
Medium transport helicopter	632	26	521%	478%
ISR uninhabited aerial vehicles (UAV)	136	9	249%	236%
Attack helicopter	360	42	141%	122%
Fighter ground-attack aircraft	1249	158	130%	110%
Heavy transport aircraft	72	21	64%	38%
Electronic-warfare aircraft	38	12	52%	52%
Tanker aircraft	44	13	56%	45%
Combat intelligence, surveillance and reconnaissance (CISR) UAV	19	12	26%	12%
ISR aircraft	21	9	39%	22%

CONCURRENCY SUITE TWO: Rescue and evacuation (RE), support to humanitarian assistance (SHA), conflict prevention (CP) x2, stabilisation and support to capacity-building (SSCB) x2, SSCB for two years' duration

Table 2.1: **2018 Land**

Role	Quantity (EU 28)	Force requirement in battalion equivalent	Percentage of force requirement in battalion equivalent (33% deployability, incl. rotation)	Percentage of force requirement in battalion equivalent without UK (33% deployability, incl. rotation)
Information operations	0	6	0%	0%
CIMIC	4	6	7%	7%
EOD	5	2	28%	17%
Medical	15	7	26%	10%
ISR	14	6	26%	7%
Amphibious	17	7	30%	26%
Special-operation forces	26	3	123%	94%
Airborne	33	9	52%	47%
Signals	61	6	112%	86%
Mechanised	129	16	89%	83%
Logistics	102	12	94%	72%
Engineer	129	13	115%	100%
Artillery	124	6	227%	207%

Table 2.2: **2018 Maritime**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Aircraft carriers	3	3	15%	9%
Mine countermeasures	171	24	78%	72%
Principal amphibious ships	13	17	10%	9%
Surface combatants	123	58	24%	20%
Nuclear submarines	12	4	34%	17%
Replenishment	30	11	32%	24%
Conventional submarines	41	6	75%	75%

Table 2.3: **2018 Air**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Light transport aircraft	376	12	345%	321%
Anti-surface warfare/Anti-submarine warfare helicopter	272	20	150%	118%
Medium transport aircraft	206	55	50%	46%
Heavy transport helicopter	235	70	41%	30%
Medium transport helicopter	632	135	64%	58%
ISR UAV	136	6	249%	236%
Electronic-intelligence aircraft	8	2	46%	30%
Attack helicopter	360	72	55%	47%
Fighter ground-attack aircraft	1249	76	181%	152%
Heavy transport aircraft	72	25	53%	31%
Tanker aircraft	44	16	30%	24%
Maritime-patrol aircraft	32	34	10%	10%
CISR UAV	19	12	17%	8%
ISR aircraft	21	8	29%	17%
Signals-intelligence (SIGINT) aircraft	1	8	1%	1%

RESCUE AND EVACUATION (RE) FOR THREE MONTHS' DURATION

Table 3.1: **2018 Land**

Role	Quantity (EU 28)	Force requirement in battalion equivalent	Percentage of force requirement in battalion equivalent (33% deployability, incl. rotation)	Percentage of force requirement in battalion equivalent without UK (33% deployability, incl. rotation)
Amphibious	17	1	561%	495%
Special-operations forces	26	1	858%	660%
Airborne	33	3	363%	330%

Table 3.2: **2018 Maritime**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Principal amphibious ships	13	2	215%	182%
Surface combatants	123	2	2037%	1723%

Table 3.3: **2018 Air**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Medium transport aircraft	206	5	1360%	1234%
Medium transport helicopter	632	12	1738%	1592%
Heavy transport aircraft	72	5	475%	281%

SUPPORT TO HUMANITARIAN ASSISTANCE (SHA) FOR THREE MONTHS' DURATION

Table 4.1: **2018 Land**

Role	Quantity (EU 28)	Force-requirement in battalion equivalent	Percentage of force requirement in battalion equivalent (33% deployability, incl. rotation)	Percentage of force requirement in battalion equivalent without UK (33% deployability, incl. rotation)
Medical	15	1	495%	198%
Engineer	129	1	4257%	3696%

Table 4.2: **2018 Maritime**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Aircraft carriers	3	1	104%	66%
Principal amphibious ships	13	3	143%	121%
Replenishment	30	1	999%	759%

Table 4.3: **2018 Air**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Medium transport aircraft	206	10	680%	617%
Heavy transport helicopter	235	10	776%	578%
Medium transport helicopter	632	27	773%	708%
Heavy transport aircraft	72	10	238%	141%

STABILISATION AND SUPPORT TO CAPACITY-BUILDING (SSBC) FOR TWO YEARS' DURATION

Table 5.1: **2018 Land**

Role	Quantity (EU 28)	Force requirement in battalion equivalent	Percentage of force requirement in battalion equivalent (33% deployability, incl. rotation)	Percentage of force requirement in battalion equivalent without UK (33% deployability, incl. rotation)
Information operations	0	3	0%	0%
CIMIC	4	3	15%	15%
EOD	5	1	55%	33%
Medical	15	3	55%	22%
ISR	14	3	51%	15%
Amphibious	17	3	62%	55%
Airborne	33	3	121%	110%
Signals	61	3	224%	172%
Mechanised	129	8	177%	166%
Logistics	102	6	187%	145%
Engineer	129	6	237%	205%
Artillery	124	3	455%	414%

Table 5.2: **2018 Maritime**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Aircraft carriers	3	1	35%	22%
Mine countermeasures	171	8	235%	215%
Principal amphibious ships	13	4	36%	30%
Surface combatants	123	12	113%	96%
Conventional submarines	41	1	451%	451%
Nuclear submarines	12	2	68%	33%
Replenishment	30	3	111%	84%

Table 5.3: **2018 Air**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Light transport aircraft	376	6	689%	642%
Medium transport aircraft	206	20	113%	103%
Heavy transport helicopter	235	30	86%	64%
Medium transport helicopter	632	30	232%	212%
ISR UAV	136	3	497%	472%
Electronic-intelligence aircraft	8	1	92%	59%
Attack helicopter	360	30	132%	114%
Fighter ground-attack aircraft	1249	38	362%	304%
Heavy transport aircraft	72	5	158%	94%
Tanker aircraft	44	8	61%	48%
CISR UAV	19	6	35%	17%
ISR aircraft	21	2	116%	66%
SIGINT aircraft	1	2	6%	6%

CONFLICT PREVENTION (CP) FOR TWO YEARS' DURATION

Table 6.1: **2018 Land**

Role	Quantity (EU 28)	Force requirement in battalion equivalent	Percentage of force requirement in battalion equivalent (33% deployability, incl. rotation)	Percentage of force requirement in battalion equivalent without UK (33% deployability, incl. rotation)
Amphibious	17	1	187%	165%
Special-operations forces	26	1	286%	220%

Table 6.2: **2018 Maritime**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Mine countermeasures	171	4	469%	431%
Principal amphibious ships	13	2	72%	61%
Surface combatants	123	16	85%	72%
Replenishment	30	2	167%	127%
Conventional submarines	41	2	226%	226%

Table 6.3: **2018 Air**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Anti-surface warfare/anti-submarine warfare helicopter	272	10	299%	235%
Medium transport helicopter	632	18	386%	354%
Attack helicopter	360	6	660%	568%
Maritime-patrol aircraft	32	17	21%	21%
ISR aircraft	21	2	116%	66%
SIGINT aircraft	1	2	6%	6%

PEACE ENFORCEMENT (PE) FOR ONE YEAR DURATION

Table 7.1: **2018 Land**

Role	Quantity (EU 28)	Force requirement in battalion equivalent	Percentage of force requirement in battalion equivalent (33% deployability, incl. rotation)	Percentage of force requirement in battalion equivalent without UK (33% deployability, incl. rotation)
Information operations	0	3	0%	0%
CIMIC	4	3	22%	22%
EOD	5	3	28%	17%
Military police	10	6	28%	19%
Medical	15	3	83%	33%
ISR	14	3	77%	22%
Amphibious	17	2	140%	124%
Special-operations forces	26	3	143%	110%
Airborne	33	3	182%	165%
Air defence	47	3	259%	242%
Signals	61	9	112%	86%
Mechanised	129	20	106%	100%
Logistics	102	9	187%	145%
Engineer	129	12	177%	154%
Aviation	1	3	6%	6%
Reconnaissance	66	9	121%	105%
Artillery	124	9	227%	207%
Armoured	128	9	235%	216%

Table 7.2: **2018 Maritime**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Aircraft carriers	3	1	52%	33%
Mine countermeasures	171	8	352%	323%
Principal amphibious ships	13	2	107%	91%
Surface combatants	123	11	185%	157%
Nuclear submarines	12	2	102%	50%
Replenishment	30	2	250%	190%

Table 7.3: **2018 Air**

Equipment	Quantity (EU 28)	Force-requirement quantity	Percentage of force requirement (with 33% deployability, incl. rotation)	Percentage of force requirement without UK (with 33% deployability, incl. rotation)
Medium transport aircraft	206	13	261%	237%
Heavy transport helicopter	235	22	176%	131%
Medium transport helicopter	632	14	745%	682%
ISR UAV	136	9	249%	236%
Attack helicopter	360	42	141%	122%
Fighter ground-attack aircraft	1249	158	130%	110%
Heavy transport aircraft	72	16	74%	44%
Electronic-warfare aircraft	38	12	52%	52%
Tanker aircraft	44	13	56%	45%
CISR UAV	19	12	26%	12%
ISR aircraft	21	9	39%	22%

Methodological considerations and assumptions

In this DGAP–IISS study, land capabilities are analysed based on force structure and formed units, whereas air and maritime capabilities are assessed based on equipment inventories. The study is based on data obtained from the IISS Military Balance+ database (as of 30 September 2018).

The assessments are based upon the assumption that about one-third of all equipment and units are available for deployment. For the sake of comparability, all forces and equipment of the same type or role are assumed to be equally useable in the given scenarios. If an operation is estimated to last for one year or longer, we assumed that deployed contingents would rotate every six months. For example, if a scenario generated a force requirement for 100 fighter ground-attack aircraft and the scenario had an assumed duration of four months, 300 aircraft in the inventories of European Union member states would be deemed to be necessary. If the scenario had an assumed duration of one year, rotation would drive this up to 600. If a scenario had a given duration of two years, we assumed that the fourth rotation could be taken on with units and assets that were deployed in the first rotation. Therefore in the example above, to sustain a force requirement of 100 aircraft over two years, 900 aircraft would be required in inventories.

The assessment focuses on units that fulfil a specified role in the determined scenarios. Hence, battalions are the smallest functional military unit for the analysis. Smaller formations such as companies or platoons are not included in the assessment. Furthermore, units tagged as command units but without precise information about which elements they could command (e.g., territorial commands) were not included in the assessment. Multinational commands (such as the Multinational Corps Northeast) were tagged as such, and not according to the specific national contributions to the headquarters. Given the focus on battalions as functional units, all brigades mentioned in the scenarios were treated as a requirement for three battalions of the same role. This establishes a level of comparability and quantification of forces along their roles in battalion-equivalent elements. Command capabilities were assessed according to the size of troop formations they can command (i.e., brigades, divisions and corps).

Everything that was less than 100% of the force requirement for a particular scenario or a concurrency suite was considered a capability shortfall. Every result between 100% and 200% was classified as 'adequate' against the demands of the scenarios. If more than 200% of a force requirement was judged to be available, we indicated that more was available than what was required in the context of the scenario or concurrency suite.

The sum of assumptions made for this study generates a picture of EU military capabilities that is most likely somewhat more positive than what could actually be called upon to conduct operations. For example, according to European Defence Agency (EDA) data, average deployment capability of EU land forces over the last few years has been below 30%, and the average sustainability never reaches 8%. In addition, we assumed that all EU operations could draw on the assets of all member states, which will rarely be the case. Operational commitments that EU member states will undertake in other frameworks – for example in NATO, the United Nations or multinational coalitions – were beyond the scope of this study. All assessments are therefore limited to the ability to address scenarios compliant with the level of ambition of the EU Common Security and Defence Policy (CSDP).

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