

# A VISION FOR THE FUTURE ROLE OF EUROPEAN MARITIME FORCES

## **Executive Summary**

*This Study proposes a vision for the direction of European maritime forces over a twenty-year period that captures the dynamics of uncertainty. It applies a 'scenario analysis' methodology originally developed for corporate risk management to determine the degree of endurance of naval roles and capabilities across four alternative future scenarios. Current European naval roles and capabilities are then compared to those in the most challenging scenarios to determine the relative risk associated with future trends.*

*European naval forces are currently well prepared to adapt to future uncertainty in most classic sea control, power projection and humanitarian assistance roles and related capabilities. A higher level of adaptation risk exists for the roles of joint and interagency cooperation, defence of European strategic interests abroad, civil-military cooperation and for capabilities related to strategic lift, littoral warfare, TBMD, non-lethal warfare and logistical support.*

*The need for a balanced European maritime posture, as a key enabler for the European Security Strategy and NATO Maritime Dimension of Joint Operations, is reaffirmed. European naval forces should be as multi-mission and as quickly adaptable to new roles and capabilities as possible. Joint service cooperation and multinational interoperability should be advanced as force multipliers, while effective civil-military cooperation will become ever more critical to naval roles and capabilities. The study might be repeated at regular intervals to assess risks related to emerging role and capability trends.*

## **1. INTRODUCTION**

At their 2004 meeting in Madrid, the Chiefs of European Navies initiated a study on the future role of European maritime forces in the 2025 time frame. This paper conducts that analysis, and proposes a vision for the direction of European maritime forces over a twenty-year period that minimizes risk and facilitates informed decision-making. Based on the application of scenario analysis to naval roles developed by the Channel Committee (CHANCOM), and building on the CHEN European Maritime Initiative and Maritime Dimension of European Joint Operations (MDEJO) project, the Study aims to stimulate discussion among European navies, the EU and NATO. It is intended to be additional to the NATO doctrine and principles on Allied Joint Maritime Operations (AJP 31).

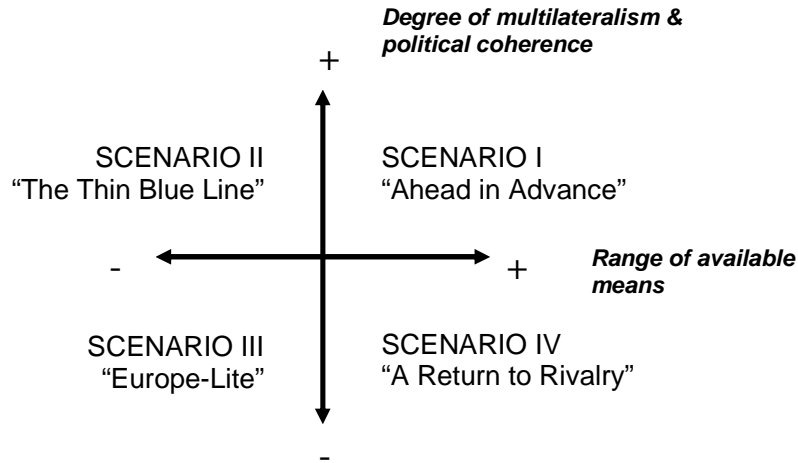
The analysis developed herein is based on an iterative process using dynamic evidence. It might be repeated in response to a significant change to one or more of the prime variables determining roles and capabilities of European naval forces. These results may form the basis for a continuing study of future trends.

## 2. METHODOLOGY

2.1. SCENARIO ANALYSIS: The Study applies a ‘scenario analysis’ methodology based on that originally developed for corporate risk management. Beginning with causal relationships between identified social, political and economic variables, this approach identifies two ‘scenario drivers’ of low future predictability, but of high impact on the future roles of European maritime forces. The Vision 2025 Working Group conducted a Variables Analysis and determined the two Scenario Drivers to be (1) The Degree of Multilateralism and Political Coherence, and (2) The Range of Available Means (Appendix A). These Drivers reflect incremental change in the international environment, and do not address the potential impact of physical shocks such as climate change.

- *Multilateralism and Political Coherence* encompasses the intensity of European integration, the functioning of existing and emerging alliances and their relationship, the willingness of publics and governments to take foreign policy action, the degree of harmonization of foreign policy interests and values, and the readiness of states to act together.
- *The Range of Available Means* is derived from both economic performance and technological development. Key analysis factors include the rate of innovation and rapidity of technology transfer, the quantum of investment in naval capabilities, the degree to which European navies can exploit new technologies, the range of economic and civil tools that can complement or replace military options, and the effectiveness of market integration in wealth-creation.

These two drivers form the basis for four future scenarios depicting four polar outcomes (Appendices B-E):



2.2. ASSESSMENT OF NAVAL ROLES AND CAPABILITIES: In the absence of a common European long-term naval strategy, each scenario was evaluated on its inherent requirements for naval roles and capabilities. Cross-scenario analysis

clearly indicated that the catalogue of functions changed little between scenarios, whereas the emphasis placed on different roles varied greatly. This allowed the Working Group to establish a common set of major naval functions and supporting Roles of European Navies (Appendix F) to be applied to the scenario analysis and to weight it according to the dictates of each scenario. The range of required naval capabilities differed somewhat between scenarios, thus a composite capability list was developed for comparative purposes. Once again, the required magnitude of naval capabilities varied greatly both within and between scenarios, resulting in a table of weighted capabilities across scenarios.

**2.3 GAP AND RISK ANALYSIS:** Having determined the weighting of roles and capabilities within each of the four scenarios, the Working Group contrasted the alternative futures with each other, and with the present roles and capabilities of European naval forces to:

- Determine a set of *Enduring European Naval Roles and Capabilities* that maintain high importance across all future scenarios, and thus of least risk in terms of future naval planning and programming.
- Identify *Contingent European Naval Roles and Capabilities* of varying importance across alternative futures, and thus of greater planning risk.
- Identify gaps between the four alternative futures and present European naval roles and capabilities.
- Assess the relative risk that alternative role and capability requirements pose to European naval planning.

### **3. RISK ANALYSIS SCENARIOS**

This section summarizes the four risk analysis scenarios, and their implications for naval roles and missions. The full scenarios and analyses are provided in Appendices B-E.

#### **3.1 'AHEAD IN ADVANCE' (Strong Multilateralism/High Means)**

In the projected scenario driven by a strong degree of multilateralism and political coherence, and a wide range of available means, the European Union develops into a full political union, with strong links to other international organisations and actors, as well as major national powers. Intensive globalisation increases interdependency between states, and raises the global demand for energy, mineral and water resources. Growth remains uneven, with regions of the developing world failing to narrow the gap with the developed world.

As a global actor, the EU wields a broad spectrum of diplomatic, economic, cultural, civilian and military capabilities placing it in the first rank of global powers. Several nations have been added to the list of declared nuclear states, while new technologies allow a number of navies, large and small, to deploy effective maritime striking power. Interstate conflicts are becoming less likely, but potentially more dangerous, while intra-state conflict and the threat of asymmetric terrorist attacks have increased.

The EU possesses a unified security architecture. The rate of innovation remains high, as does the global diffusion of new technologies in spite of multilateral regulation, leading to a number of states and non-state actors acquiring advanced military capabilities. Commercial imperatives increasingly dominate military R&D and procurement strategies. Increasing wealth within Europe has fuelled a more individualistic society, less attracted to obligation-based careers such as the military service. Parallel moral standards encourage in the general public a 'zero-loss' mentality for European military operations.

### 3.2 THE THIN BLUE LINE (Strong Multilateralism/Low Means)

In Scenario #2, the EU has developed an integrated economy along with a coherent foreign and security policy and working European command structure. However, the weak state of the European economy in the face of competition from new economic competitors prevent the formation of a robust European security architecture, and severely limits the funding available to European naval forces and militaries. A number of emerging states constitute a powerful third tier of the global economy, and are emerging as military peer competitors. European economic weakness is driven by the success of the global economy in lifting new large parts of the developing world out of poverty and into competition with Europe. Although innovation remains strong, Europe suffers internationally a lack of competitiveness driven by the financial burden of an aging population and costs of the European social model.

The threat of international terrorism has declined, giving way to greater concern with state development of WMD, missile technologies, and the emergence of a number of rival powers. Instability, low intensity conflicts and military coups in the developing world have become commonplace. Organised crime has increased, and has become institutionalised in the state apparatus of many developing countries. Global warming and fresh water scarcity exacerbate international relations.

European armed forces are substantially reduced from their 2005 numbers as armies completed their post-Cold War downsizing. The rate of technological innovation remains high, leading to the development of highly effective but also vulnerable network-centric C4ISTAR systems. European navies suffer from outdated technologies and legacy systems, while competitors have closed the technological gap. Public opinion supports a common European foreign policy, but is largely unwilling to underwrite military resources with greater taxation or a reduction in social services. There is also a strong 'zero loss' mentality except in pursuit of purely humanitarian goals. Although the EU wields substantial diplomatic and cultural power, its global economic leverage and military reach is limited.

### 3.3 EUROPE-LITE (Weak Multilateralism/Low Means)

In Scenario #3, European economic and political integration have faltered, resulting in serious financial constraints and the re-emergence of separate foreign policies with ad hoc coalitions to pursue specific interests. This breakdown in

multilateralism has spread globally, leading to an unstable world environment, and inability to combine capabilities in pursuit of common interests. Economic weakness and shifts in public interest focus national budgets primarily on social and internal security issues.

Terrorism remains the key asymmetric threat. Instability in Africa, the Middle East and central Asia has dramatically increased, requiring substantial humanitarian support. Organised crime, powerful multinational companies, and lax governments have facilitated WMD proliferation. Worldwide competition for scarce energy resources further strains economic recovery while globalisation raises cultural tensions within conservative societies.

Defence spending remains low, driven by short-term planning and incapable of substantial improvements in interoperability. As a result, most European forces are incapable of interoperating with potential European or global partners. Multinational stabilization and intervention operations are conducted by coalitions of the willing. Independent missions by coalitions of European states concentrate on the lower spectrum of Petersberg Tasks, with emphasis on humanitarian disaster relief and evacuation operations. European leaders hesitate to commit armed forces to high-risk conflicts. The public demand for international legitimacy in the use of force has increased, as well as stricter public scrutiny of the law of armed conflict.

### 3.4 A RETURN TO RIVALRY (Weak Multilateralism, High Means)

As in Scenario #3, EU political integration and international military cooperation falters. However, the weakening of multilateralism is accompanied in Scenario #4 by substantial economic growth in the transatlantic world. Some European economies have prospered, providing the resources for development of substantial national military capabilities, and autonomous foreign and security policies. Lack of interoperability substantially degrades the collective capabilities of European naval forces.

Globalisation leads to a sharp polarization of global wealth, with the poor regions of the world seeing little hope of changing their fortunes. As a result, asymmetric terrorist attacks constitute the greatest security threat in Scenario #4, followed by the risk of great power confrontation over economic interests.

Multinational Alliances continue to exist, but conduct few activities. Small coalitions occasionally arise to conduct humanitarian missions, usually in support of international organisations, and where missions are of limited duration and low risk. Public opinion has become increasingly risk averse yet insistent on increased security, leading European militaries to develop complex weapons systems and advanced surveillance and detection technologies. But as these systems are optimised for national use only, a lower level of interoperability exists across Europe.

#### 4. SITUATION 2005: CURRENT ROLES AND CAPABILITIES

To perform a gap and risk analysis of European naval forces in 2005, the Working Group weighted current European naval roles and capabilities based on the methods used in constructing the four future scenarios. Situation 2005 can be best described as possessing a moderate but uneven level of multilateral cooperation, and a limited range of available means. The current situation shares with Scenario #2 a broad spread of classic sea control capabilities, with limited capacity for strike and amphibious operations, and very limited lift and logistics.

#### 5. GAP-ANALYSIS OF FUTURE ROLES AND CAPABILITIES

5.1 METHODOLOGY: Scenarios #1-4 and Situation 2005 were used to conduct a Gap Analysis aimed at identifying a set of *Enduring European Naval Roles and Capabilities* that maintain high salience across all future scenarios, and *Contingent European Naval Roles and Capabilities* of varying importance across alternative futures. The Gap Analysis methodology employs the following classifications:

- The '0-3' weighting scale used for naval roles and naval capabilities is employed for the Gap Analysis.
- *Enduring Roles and Capabilities* are defined as those exhibiting a maximum deviation of one category of importance across all four future scenarios. This approach also captures enduring roles and capabilities of lesser importance, described as 'enduring (low)'.
- *Contingent Roles and Capabilities* are defined as those exhibiting a maximum deviation of two categories of importance across all four future scenarios. For capabilities, this implies a shift from marginal capability to full operational capability.
- *High Variance Roles and Capabilities* are defined as those exhibiting a maximum deviation of three categories of importance, from low to high salience for roles, and from zero to full operational capability.

5.2 GAP ANALYSIS OF EUROPEAN NAVAL ROLES: Appendix F assigns values to Major Naval Functions and supporting Roles of European Navies across the four scenarios. Major Naval Functions are found to vary little, demonstrating the enduring nature of maritime operations. However, the importance of supporting Roles between future scenarios varies greatly. **Table 1** charts the relative endurance of Role importance across the four scenarios within each of the five general naval functions:

Major Function	Variability of Supporting Naval Roles
Constabulary Duties	<b>Enduring:</b> - Combined operations with non-European navies <b>Contingent:</b> - Regional presence and surveillance - Joint operations - Combined Operations among European navies - Interagency cooperation <b>High Variance:</b> - None

<b>Naval Participation in Defence</b>	<b>Enduring:</b> - Combined operations with non-European Navies <b>Contingent:</b> - Collective defence - Joint operations - Combined operations among European navies - Interagency operations - Civil-military operations - Sea control/SLOCs - Deterrence <b>High Variance:</b> - Defence of European strategic interests abroad
<b>Force Projection</b>	<b>Enduring:</b> - Crisis management operations - Interagency operations - Civil-Military cooperation <b>Contingent:</b> - Maritime interdiction operations - Joint Operations - Combined naval operations <b>High Variance:</b> - Enforced entry operations - Strike operations
<b>Defence Diplomacy</b>	<b>Enduring:</b> - Interagency cooperation <b>Contingent:</b> - Maritime cooperation - Naval presence <b>High Variance:</b> - None
<b>Technical and Humanitarian Assistance</b>	<b>Enduring:</b> - Humanitarian assistance - Combined operations with non-European navies - Interagency operations - Civil-Military operations <b>Contingent:</b> - Aid to civil power - Joint operations - Combined operations among European navies <b>High Variance:</b> - None

*This analysis finds that Enduring Roles across the five Major Naval Functions are centred mostly on combined operations with non-European navies, crisis management operations, interagency cooperation, civil-military cooperation and humanitarian assistance. The importance of these roles can be expected to be constant across the four scenario futures. In contrast, Contingent Roles encompass most traditional naval roles and missions, and will differ moderately in emphasis. At a high level of variance, and thus of planning risk, are defence of European strategic interests abroad, enforced entry operations and strike operations.*

**5.3 GAP ANALYSIS OF EUROPEAN NAVAL CAPABILITIES:** As with naval roles, the quantum of European naval capabilities varies greatly across scenarios. Unlike roles, however, a larger and better-defined set of Enduring Capabilities emerges from the analysis. **Table 2** charts the variation in capability magnitude

across the four future scenarios and Situation 2005. Capabilities were weighted on the basis of four thresholds:

- *0-No capability*
- *1-Capable of participation in coalition operations, but no capacity to conduct independent operations.*
- *2-Independently capable of achieving desired effects at tactical level*
- *3-Independently capable of achieving desired effects at operational level*

	Sc 1	Sc 2	Sc 3	Sc 4	Sit 2005	Var Sc 1-4	Classification
<b>Early Warning</b>	3	2	2	3	2	1	Enduring
<b>Amphibious</b>	3	2	0	3	3	3	High Variance
<b>Strategic Lift</b>	3	1	1	2	1-2	2	Contingent
<b>Tactical Lift</b>	2	2	1	2	1-2	1	Enduring (low)
<b>Precision Strike</b>	3	2	1	3	2	2	Contingent
<b>AAW</b>	3	3	1	2	2	2	Contingent
<b>ASUW</b>	3	3	2	2	3	1	Enduring
<b>ASW</b>	3	3	1	2	2	2	Contingent
<b>Mine Warfare</b>	3	2	2	3	2	1	Enduring
<b>Force Protection</b>	3	2	2	3	2	1	Enduring
<b>Littoral Warfare</b>	2	1	1	3	1-2	2	Contingent
<b>Maritime Patrol</b>	3	3	2	2	3	1	Enduring
<b>Maritime Escort</b>	3	3	2	2	3	1	Enduring
<b>TBMD</b>	2	2	2	3	1	1	Enduring
<b>Non-Lethal Warfare</b>	2	1	1	1	0	1	Enduring (low)
<b>Special Warfare</b>	3	2	0	3	3	3	High Variance
<b>C4ISTAR</b>	3	2	2	3	2-3	1	Enduring
<b>Sea Basing</b>	2	1	0	2	1-2	2	Contingent
<b>Medical</b>	2	2	2	2	1-2	0	Enduring
<b>Logistical Support</b>	3	2	2	2	1	2	Contingent
<b>CIMIC</b>	2	2	2	2	1	1	Enduring

Enduring Capabilities include classic sea control capabilities of ASUW, mine warfare and maritime patrol and escort and C4ISTAR. The danger of asymmetric threats is reflected in the endurance of early warning and force protection. The enduring humanitarian assistance role is reflected in medical and CIMIC capabilities. TBMD is viewed in all four potential futures as requiring a higher capability than now exists. Tactical lift and non-lethal warfare are of an enduring low value, except in the most optimistic of resource scenarios. Contingent capabilities include strategic lift, precision strike, AAW, ASW, littoral warfare, sea basing and supply. High Variance capabilities comprise special warfare and amphibious assault

5.4 STRUCTURAL PROFILES OF EUROPEAN NAVAL FORCES: Out of this process emerged four alternative structural profiles for future European naval forces:

- *A Comprehensive Capability European Navy (Scenario #1- Strong Multilateralism, High Means):* This scenario requires that European navies be essential enablers for Europe's global role, wielding a wide range of roles and capabilities. Economic success allows for most of these requirements to be met. As a result the European Navy that results in Scenario#1 is a navy of

comprehensive capabilities across nearly all naval roles: defence of the EU and its interests abroad; strike and amphibious power projection in a joint and combined environment; and operating across the spectrum of military and non-military tasks.

- *European Sea Control Navies (Scenario #2- Strong Multilateralism, Low Means):* While this scenario requires that European navies be possessed of a wide range of roles and capabilities similar to Scenario #1, economic weakness and lack of funding substantially constrains their achievement. As a result the European Navies that result in Scenario #2 are largely 'sea control' navies focused on traditional surface, anti-air and anti-submarine roles, with a few states possessing modest capacity in strike and amphibious assault.
- *Sea Presence and Humanitarian Assistance Navies (Scenario #3-Weak Multilateralism, Low Means):* The weakness of military cooperation, lack of means and emphasis on humanitarian operations result in European naval forces focused primarily on homeland defence, minimum 'sea presence' missions and humanitarian assistance. Emphasis on inter-service joint operations at national level is high, as is the development of niche capabilities, while multinational interoperability is very low.
- *Restricted Power Projection and Deterrence Navies (Scenario #4: Weak Multilateralism, High Means):* The weakening of political integration and military cooperation, substantial economic means and emphasis on asymmetric threats and force projection result in a small sub-set of European navies focused primarily on 'power projection' missions. Most naval forces aspire independently to a full range of naval roles and robust range of capabilities. However, smaller naval forces will focus their efforts on self-defence and constabulary duties. Even larger navies face overstretch, leading to over-emphasis of enforced entry and strike capabilities at the expense of classic sea control roles. Improvement in inter-service joint operations at national level is lacking, as is the development of niche capabilities, while multinational interoperability is low.

## **6. RISK ANALYSIS OF SITUATION 2005**

**6.1 RISK ANALYSIS OF CURRENT NAVAL ROLES:** The next step identifies the relative risk to current European navies of change in the future environment. To accomplish this, the emphasis on current European naval roles is compared against the most challenging scenario for each role. This approach uses the following metric:

*0 - Maintenance:* Current European naval forces emphasize roles or possess capabilities that meet the requirements of the most challenging future scenario. Only relative maintenance of that role or capability is required.

*1 - Low Risk:* A differential of one category of importance for roles or capabilities normally requires only a quantitative improvement in assets or platforms, e.g. additional purchase of precision guided munitions to raise a capability from the tactical to the operational level. It does not imply a need to undertake significant

new training, or to acquire (or re-acquire) advanced technologies. Lead times to raise roles and capabilities one category is expected to be short.

2 - *Medium Risk*: A differential of two categories of importance challenges the flexibility of navies to adapt to the emergence of the most challenging scenario for that role or capability, e.g. the need to improve ASW from a marginal capacity to the full operational level. Substantial additional training and the acquisition of new technologies may be required. Lead times can be expected to be much longer.

3 - *High Risk*: A differential of three categories of importance for roles and capabilities requires naval forces to build operational level excellence from a zero baseline. Lead times will likely be too long to meet emerging challenges.

**Table 3** indicates that European navies are currently well prepared to adapt to future uncertainty in a number of roles, including sea control, maritime interdiction operations, joint and combined operations for collective defence, enforced entry operations, strike operations, defence diplomacy and humanitarian assistance. *However, a higher level of risk exists in the differential between current and potential roles in the general areas of joint and interagency cooperation, defence of European strategic interests abroad and civil-military cooperation:*

Major Function	Risk Assessment
<b>Constabulary Duties</b>	<p><b>Maintenance</b></p> <ul style="list-style-type: none"> <li>- Combined operations with non-European navies</li> </ul> <p><b>Low Risk:</b></p> <ul style="list-style-type: none"> <li>- Regional presence and surveillance</li> <li>- Combined Operations among European navies</li> </ul> <p><b>Medium Risk:</b></p> <ul style="list-style-type: none"> <li>- Joint operations</li> <li>- Interagency cooperation</li> </ul>
<b>Naval Participation in Defence</b>	<p><b>Maintenance:</b></p> <ul style="list-style-type: none"> <li>- Combined operations with non-European Navies</li> <li>- Sea Control/SLOCs</li> </ul> <p><b>Low Risk:</b></p> <ul style="list-style-type: none"> <li>- Collective defence</li> <li>- Joint operations</li> </ul> <p><b>Medium Risk:</b></p> <ul style="list-style-type: none"> <li>- Combined operations among European navies</li> <li>- Interagency operations</li> <li>- Civil-military operations</li> <li>- Deterrence</li> <li>- Defence of European strategic interests abroad</li> </ul>
<b>Force Projection</b>	<p><b>Maintenance:</b></p> <ul style="list-style-type: none"> <li>- Maritime interdiction operations</li> <li>- Enforced entry operations</li> <li>- Combined naval operations</li> <li>- Interagency operations</li> </ul> <p><b>Low Risk:</b></p> <ul style="list-style-type: none"> <li>- Crisis management operations</li> <li>- Strike operations</li> <li>- Joint operations</li> </ul> <p><b>Medium Risk:</b></p> <ul style="list-style-type: none"> <li>- Civil-Military cooperation</li> </ul>
<b>Defence Diplomacy</b>	<p><b>Maintenance:</b></p> <ul style="list-style-type: none"> <li>- Maritime Cooperation</li> </ul> <p><b>Low Risk:</b></p> <ul style="list-style-type: none"> <li>- Naval presence</li> </ul>

	<b>Medium Risk:</b> - Interagency cooperation
<b>Technical and Humanitarian Assistance</b>	<b>Maintenance:</b> - Humanitarian assistance <b>Low Risk:</b> - Combined operations with non-European navies - Interagency operations - Civil-Military operations - Joint operations <b>Medium Risk:</b> - Aid to civil power - Combined operations among European navies

6.2 RISK ANALYSIS OF CURRENT EUROPEAN NAVAL CAPABILITIES: **Table 4** compares Situation 2005 capabilities against the highest requirement across four future scenarios. The 2005 naval capability profile largely parallels that for roles, with European navies well prepared to adapt in classic sea control capabilities, amphibious assault and precision strike, special warfare, C4ISTAR, sea-basing, medical support and CIMIC. *A higher risk of inability to adapt exists for strategic lift, littoral warfare, TBMD, non-lethal warfare and logistical support.*

Risk Assessment	Capabilities
<b>Maintenance</b>	Amphibious assault (if current programmes complete), ASUW, maritime patrol and escort, special warfare
<b>Low Risk</b>	Early warning, tactical lift, precision strike, AAW, ASW, mine warfare, force protection, C4ISTAR, sea basing, medical, CIMIC
<b>Medium Risk</b>	Strategic lift, littoral warfare, TBMD, non-lethal warfare, logistical support
<b>High Risk</b>	None

## 7. FINDINGS

7.1 ENDURING ROLES AND CAPABILITIES: The Study demonstrates the existence of a common set of Enduring Roles and Capability levels for European naval forces. These will be important in any of the four analysed futures, and present a low level of risk to the program planner or decision-maker with regard to the question of future utility.

*Enduring roles include crisis management operations, interagency cooperation, civil-military cooperation, humanitarian assistance, and cooperation with non-EU partner navies. Enduring capabilities include sea control, ASUW, mine warfare, maritime patrol and escort, C4ISTAR, early warning, force protection, TBMD, medical and logistical support. Sea control capabilities stand out as the bedrock on which independent power projection capabilities are built. The Study identifies an increasing role for network-linked civil-military cooperation across alternative futures.*

7.2 CONTINGENT ROLES AND CAPABILITIES: A number of roles and capability levels alter widely in importance between alternative futures. Although contingent, they are no less vital in a given scenario. Most traditional naval roles

will vary with the future environment.

*Contingent capabilities include amphibious, strategic lift, precision strike, AAW, ASW, littoral warfare, special warfare, sea-basing and logistical support.*

**7.3 RISK ANALYSIS OF CURRENT EUROPEAN NAVAL ROLES:** European naval forces are currently well prepared to adapt to future uncertainty in the areas of sea control, maritime interdiction operations, joint and combined operations for collective defence, enforced entry operations, strike operations, defence diplomacy and humanitarian assistance.

*A higher level of risk exists in the differential between current and potential roles in the general areas of joint and interagency cooperation, defence of European strategic interests abroad and civil-military cooperation.*

**7.4 RISK ANALYSIS OF CURRENT EUROPEAN NAVAL CAPABILITIES:** European naval forces are currently well prepared to adapt in classic sea control capabilities, amphibious assault and precision strike, special warfare, C4ISTAR, sea-basing, medical support and CIMIC.

*A higher risk of inability to adapt exists for strategic lift, littoral warfare, TBMD, non-lethal warfare and supply.*

## **8. PREPARING FOR AN UNCERTAIN FUTURE: CONCLUSIONS AND RECOMMENDATIONS**

**8.1 PLAN TO MAXIMIZE FLEXIBILITY:** The results of this study reinforce the need for European naval forces to be agile and flexible in adapting to changing circumstances. *Within financial or technological limits, naval vessels and assets should be as multi-mission and as quickly adaptable to new roles and capabilities as possible.*

**8.2 ENHANCE INTEROPERABILITY:** The Study makes clear the increase in effective naval power provided by strong multilateralism and interoperability. Scenarios #2 and #3 illustrate capability differences in similar economic circumstances, where cooperation and interoperability act as force multipliers. *The general effectiveness of economically constrained but interoperable European naval forces in Scenario #2 roughly equals the collective capability of better-funded but stand-alone navies in Scenario #4. Multilateralism and interoperability thus have as much of an impact on capability as a robust economic environment.*

**8.3 EMPHASIZE JOINT COOPERATION:** The Study provides an initial indication that Joint and Combined interoperability operate different dynamics. Joint Interoperability may be maximized in situations of weak multilateralism and low means. Conversely inter-naval combined operations appear maximized in situations providing both the political will to act internationally and the encouragement of economic constraint. *During periods of economic plenty it will be important not to neglect joint cooperation and integration.*

8.4 IMPROVE CIVIL-MILITARY COOPERATION: The need for cooperation across the range of military and civilian state organizations, international organization and NGOs is a constant high priority across all future scenarios. Yet this is also an area of identified risk, in which current inter-agency relationships need to be reinforced. *Naval linkages with other national agencies of state, international organizations and NGOs should be deepened as a matter of priority.*

## **9. ENVISIONING THE FUTURE OF EUROPEAN MARITIME FORCES**

*A clear determination of future risks and present realities can provide a solid basis on which to develop a European maritime strategy in support of the European Security Strategy, and NATO doctrine and principles on Allied Joint Maritime Operations (AJP 3.1). The Vision 2025 project communicates our concept of more closely integrated European naval forces, capable of supporting joint forces with a wide range of roles and capabilities, in close cooperation with our transatlantic and international allies and partners, military and non-military. To prepare for an uncertain future, European maritime forces will further develop versatile assets capable of rapid adaptation to changing circumstances. These preparations will reflect the enduring roles and capabilities identified in this study, as well as those more contingent capabilities that circumstances and prudence could require. We will be vigilant not to find ourselves in situations where the roles and capabilities mix of our forces are ill matched with future naval or joint requirements, or where training, technologies or long-lead time assets must be re-developed from a low resource base. This study reaffirms the need for a balanced, adaptable and interoperable European maritime posture, as a key enabler for the European Security Strategy.*

## Appendix A

### Outline description of the 2 selected scenario drivers

#### **1. Degree of multilateralism and political coherence**

*The international environment both globally and within Europe will change. The coherence of international society, well functioning international institutions and a rule-based international order will have a high impact on stability. Thus the degree of multilateralism and political coherence within and beyond Europe has an influence on the role of European maritime forces.*

Related to:

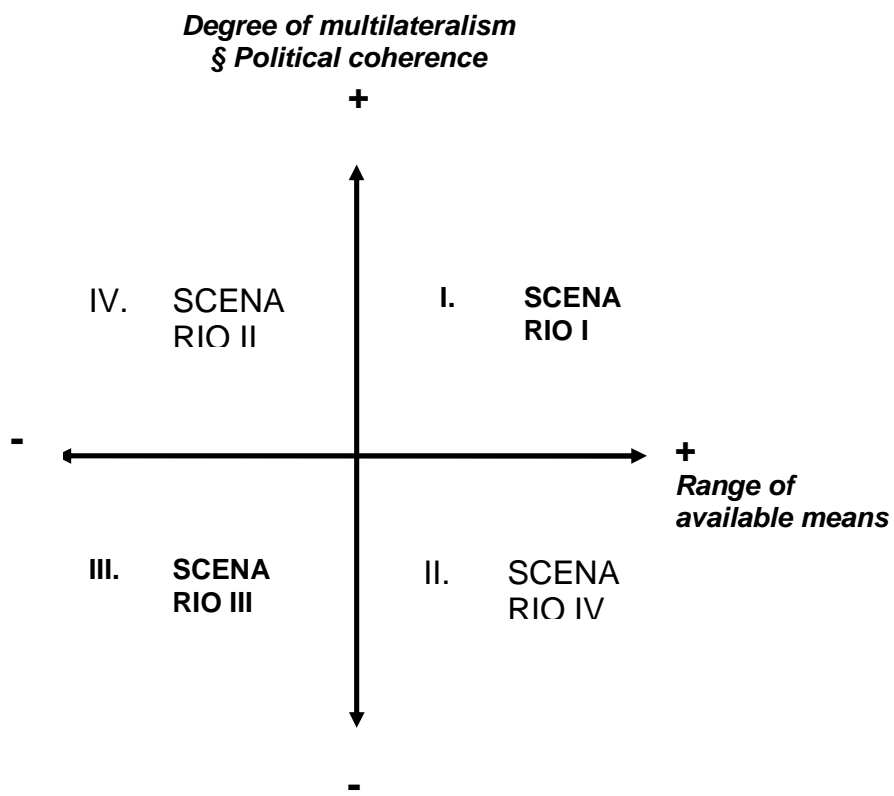
- **Existing and emerging alliances** and powers and their inter-relationship
- **Will to act:** This is the willingness of publics and governments to take any foreign or defence policy action, which is usually driven by the degree of political coherence existing within a state.
- **Degree of Multilateralism:** This relates to the willingness to act together, assuming no cleavage in substantive policies.
- **Harmonisation of Foreign Policy interests and values:** This relates to the extent to which states share common foreign policy goals

#### **2. Range of available means**

*New technologies and economic developments will impact European maritime capabilities and tactics, as well as those of adversaries.*

Related to:

- *Rate of innovation: Innovation and R&D is a critical driver for gaining strategic advantage in terms of political, economical and military power. The danger of leading technologies being used by opponents and the transfer of critical knowledge without control will emerge as concern areas.*
- *Quantum of Investment: the financial provision for naval developments, procurement, operations and maintenance.*
- *Exploitation of Technologies: the degree to which cutting-edge technology can be used by European navies. This includes doctrinal choices and technical, legal and moral constraints.*
- *Range of political-military options and alternatives: extent to which broad economic and civil tools are available to be used in concert with, augmented by or replaced by military options.*
- *Effectiveness of market integration: given the clear linkage between finances, economy, the tax base, technology and procurement, the intensity of markets (both in general and in the defence industries) is an important factor.*



## Appendix B

### I. Scenario 1

*'High Degree of Multilateralism and political coherence supported by full range of available means'*

**Participants: IT (leader) - NL - NO - TU**

### II. "AHEAD IN ADVANCE"

#### 1. SCENARIO BASELINE

EU has developed a full political union and has built up strong links to other international organisations and actors as well as major national powers.

EU is willing to play global actor in all political fields, preserving strong transatlantic relationship.

***Individual governments and public opinion support this global political approach, being convinced that this is the best way to solve the more and more global interrelated issues.***

EU as global actor disposes of a broad spectrum of means including diplomatic, economic, cultural, civilian and military means placing it in the first rank of global powers. R&D is well focussed to create favourable conditions for future challenges.

Although European navies are well set up, a future distraction of resources cannot be ruled out because of decreasing public support of military power in a stable political environment.

#### 2. SCENARIO DEVELOPMENT

##### 2.1 GLOBAL SITUATION

*"The president of the European Union threw today with an impressive swing the bottle of champagne against the massive hull of the new carrier and baptised her EUS ROMA. She is the 5th carrier in row of the 'Brussels' class, a successful EU 'high tech – low complement' building program that started back in 2020. She can control about 10 UCAV's at the same time. - EU Press, Brussels, May 5, 2025."*

More pervasive and intensive globalisation increase interdependency between states. This may further discourage interstate conflict, especially between those countries with large open economies. Overall, the developing world is not significantly closing the gap with the developed world. This is made very clear through the global media. The global demand for energy and mineral resources continue to increase, due primarily to development and industrialisation in Southern and Eastern Asia. There is little prospect of revolutionary breakthroughs in alternative supplies. There may be occasions where certain mineral resources rise to strategic importance due to heavy demand and limited supply. This could

include sources like Antarctica's seabed. Although China and India are emerging as economic powers, US and EU are still the key economic powers together with Japan. Both US and EU try to increase their dominance in the global defence industry, threatened by emerging competitors in Israel, India and China. Several new states have become declared nuclear powers over the past twenty years, while the availability of cruise missile technology has spread. Advancement in UAV technology and air independent propulsion diesel submarines has allowed a number of states, large and small, to deploy effective maritime striking power. Trans-national companies increase in size and are expected to co-operate with state governments in response to mutual threats such as terrorism and organised crime. Globalisation is further going to limit national economic policies, penalise poor governance and spread the impact of economic and political shocks threatening stability.

The level of actual EU defence spending is based on the level of perceived threat and the role of EU as a powerful global actor. There is a strong EU interest and commitment for Research & Development.

**Political situation** – World wide state sovereignty continue to be eroded; states are more constrained in their internal and external policies, due to internal social and economic demands and external supranational pressure.

EU members are fine-tuning a new Constitution aiming at building up the United European States, a (con)federation whose degree of political coherence is that of a full Union. As a first step the Council President and Foreign Minister positions have been effective in promoting a coherent EU foreign and security policy.

Accordingly, EU integration encompasses a full military integration. The Chief of EU Defence Staff avails of an integrated multinational HQ in Brussels, encompassing all functions previously performed by the national Staffs. EU Single Services HQs have been located in order to contribute to an effective link with the industrial European poles derived from the former national industries and shipyards. Air-naval bases have been integrated and rationalized accordingly.

EU will use its power to influence the US to steer a more multilateral course. Because of its growing economic and political weight, EU is of crucial importance to US security and prosperity on its eastern hemisphere, while Asia, increasing in relative significance, is still divided among several powerful actors. The different EU local governments and public opinion support the collective European approach resulting in a strong European Security and Defence Policy providing civil and military means for global conflict prevention and crisis management; The frequency of major interstate conflicts world wide is likely to diminish due to the prevalence of democratic norms and increased economic interdependency. When they do occur, the local and global impact is quite significant, urging EU or US to intervene, risking possible asymmetric response.

Power, among geopolitical actors, shifts from states to non-governmental actors, including inter-governmental and non-governmental organisations, trans-national corporations, organised crime and terrorists. They use their influence to try to set the international political agenda. Trans-national conflicts demand more international attention and response from supranational organisations like UN and NATO, US and EU.

In this arena:

- UN, although accepting EU and Japan as new members in the Security Council, is unlikely to be reformed sufficiently in order to be able to lead a comprehensive response;
- NATO, continuing to broaden its membership, has grown into a more political and less military alliance, however remaining a precious source of standardization of procedures and equipment for variable geometry coalitions;
- US remains the central and largest military player in shaping international relations, being ready to use its predominance to act unilaterally, although seeking to enlist China and Russia support;
- Russia, although still mainly inwardly focused preventing a possible collapse, is willing to revert, in the long term, to playing her historical role as a superpower;
- China and India gain regional political, economical and military power, possibly emerging into global powers;
- Japan resumes a central role in the architecture of global security overcoming his traditional military Self-Defence attitude;
- the Middle East remains a political area of global interest because of social (cultural, religious) tensions and economic importance;
- Sub-Saharan Africa faces severe challenges influencing global relations and stability caused by poverty, disease, hunger, poor governance and potential radicalism. This situation is increasing the call for humanitarian support.

New political developments of interest are likely to emerge in:

- Central Asia because of fossil fuel exploitation and weak governance;
- South Eastern Asia because of Islamic separatism and from the growing military power of East Asian states in combination with the absence of well-developed regional security structures.

All in all, the world remains a challenging and complex political environment. There is little progress in the development of independent supranational enforcement mechanisms to compel states to obey international law. International law remains subject to interpretation. UN mandates remain desirable to underpin Coalitions' actions.

**Available means** - US and EU dominate technical innovation in all areas, particularly defence. Japan remains a key player, while India and China are becoming significant competitors. In many areas the rate of technological innovation remain high e.g.:

- increase in speed, connectivity and pervasiveness of information and communications technology continue;
- more remotely controlled weapon systems become available;
- cognitive science improve human-machine interfaces;
- maturing of nanotechnology and space environment is more widely utilised both military and commercially.

Commercial imperatives increasingly direct the nature of research and development. Outside US and EU, the relatively low level of public spending on science and technology is likely to remain at relatively low level. It is increasingly hard to control key technologies. Multilateral regulation do not suffice. Diffusion, collaboration and leakage lead to a widening number of non-state actors

accessing advanced military technologies. Biological weapons further proliferate and become more sophisticated, which will speed up the advances in prevention and treatment against infectious diseases.

Within this environment and well aware of the mounting “zero-loss” mentality EU is funding research for military-specific technology and exploiting commercially developed innovations for military use in order to secure a full range of available military means to be able to act globally to secure its interests.

The Headline Goal Requirements Catalogue (HHC02) developments, as well as the EUMC Military Rapid Response and EU Battle Groups (EUBG) concepts, made clear that EU needed the very same assets offered to the NATO Response Force. EU full military integration and the will to operate with US forces as an equal implied:

- a strong focus on NATO political relationship, but a gradual slowdown in NATO military initiatives and activities;
- the development of shared EU C4ISTAR networks, interoperable with the equivalent US nets.

## 2.2 THREAT ENVIRONMENT

*“Shit my screen just turned black. What the ...happens? Get me the system manager...Now! #*

*Sorry sir, our network has been hacked by some sort of syndicate. A lethal virus just crashed our main frame. Time to repair unknown. # I need the system NOW, we are in the middle of a NEO off the coast of.....- EU OHQ, 0300 AM, Oct 2, 2025”*

Inter-state conflict is becoming less likely but potentially more dangerous and violent, while intra-state conflict is more and more frequent and develops dangerous side aspects for security, mainly boosting asymmetric responses. Therefore consequences for international security increase.

There are more conflicts between state militaries and non-state actors, particularly organised crime and (fundamentalist) terrorists. A range of countries, like India and China, extend their power projection capabilities and become more assertive. Conflict and instability arise from global demands for energy, mineral resources, fresh water, food, and by the effects of global warming, pollution and forced cultural globalisation. We see piracy, illegal trade and production, massive migration flows and radicalism.

Weapons of mass effect (NBC) and their means (ballistic) of delivery have proliferated. Instable (rogue) states and non-state actors have been able to acquire them and are a clear and present security threat.

The same actors adopt asymmetric strategies such as denying force entry, disabling force multipliers (e.g. C4ISR), disrupting enablers and avoiding combat to deny conventional military advantages to US and EU.

Technological innovation offer new weapons like behaviour-controlling chemicals, delayed-lethality and non-lethal weapons like electromagnetic pulse weapons, radiological and carcinogenic chemical weapons.

Combat is increasingly shaped by the implications of remote and autonomous systems. It is likely to take place over a wider number of environments including space, cyberspace and the electromagnetic spectrum.

Internal EU demographic and cultural (individualism, legal accountability) developments make it much more difficult to find young people interested in joining the service. The power of media makes it much more complicated to explain the reason for military action and makes operational security more challenging.

EU is to be ready for any form of threat.

### 2.3 SOCIAL DEVELOPMENTS

*“ No, I don’t see the need for more Navy ships or aircraft or soldiers. We want no more recruitment for EU Defence. We live in a safe part of the world. You know, the health service and the economy, they need more young personnel, otherwise society will collapse. The majority of the population is over 55 years old. How long can we continue to weigh this financial burden? It’s ridiculous – BBC World News, June 16, 2025”.*

Cultural globalisation mainly adopted US and EU models, while increasing interchanges among different cultures increase understanding and tolerance in many societies. However, such a free exchange is a cause of national, regional and local frustrations in the more conservative societies. This is likely to increase frequency and range of extremist and fundamentalist attacks on Western interests.

Both chronic and infectious diseases remain of significant influence on human well-being, despite the advances foreseen in biotechnology. In the majority of the developing world diseases like malaria and HIV still reduce the prospects of economic growth. Increasing population in the developing countries result in a growing demand for fresh water. Therefore a larger participation in humanitarian assistance, disaster relief operations and illegal interstate migration control is envisaged.

In EU there is governmental and individual support for the global political approach, thus boosting a broad support for an active EU role in this field. EU needs to pay attention and manage the problem of its ageing population. This is likely to demand increased social welfare provision, and a more positive view of the potential benefits of immigration. It also requires a revised recruitment strategy for the armed forces. There are indications that relativism, pragmatism and multiple identities will lead to a more individualistic society reducing the attraction to obligation based jobs such as in the armed forces.

Closely related to this development are the evolving social patterns and changing moral standards in society possible leading to a zero-loss mentality for global commitments, which makes recruitment for the armed forces even a bigger challenge.

## 3. FIRST FINDINGS

### 3.1 CONSTRAINTS AND CONSEQUENCES FOR NAVIES

First consequence: increasingly expensive air-naval forces succeed in achieving the effect-based results. Joint Amphibious capabilities are essential in striking an incoming threat before it manifests itself and in providing NEO/MIO. Early surgical

attacks are encouraged in order to defuse possible crises before they fully develop; naval platforms are permanently deployed in international waters close to the potential world hot-spots.

Second consequence: zero-loss mentality and difficulties in recruitment (constraints) encourage the development and employment of both above and under-water unmanned vehicles. Surface units specialize themselves as remote-control stations. The extensive use of UAVs claims for new air control international procedures in the airways, while the increasing number of UUVs implies the development of similar regulations for the water ways.

Third consequence: EU integration encourages a geographic specialization among air-naval components, to be pursued in parallel to an industrial rationalization in “niche” poles.

### 3.2 PRIMARY ROLES FOR EUROPEAN NAVIES

- Defence of the European territory and interests abroad.
- Projection operations in a joint/combined environment across the spectrum of military and non military tasks.
- Strike.
- Deterrence, strategic influence, presence and surveillance.
- Constabulary duties.
- Maritime cooperation, aimed at supporting stability and reform in areas of strife.
- Humanitarian Assistance.

### 3.3 INDISPENSABLE NAVAL CAPABILITIES

Since future operations are likely to be more complex and multidimensional, future military forces must be agile, joint and expeditionary.

Interoperability is to be ensured between US and EU forces, while is to be encouraged with likely partners (Japan etc.).

Specific capabilities are the following:

- Early Warning, including:
  - ✓ information gathering,
  - ✓ evaluation,
  - ✓ operational/tactical assessment;
- Amphibious assault for limited operations (NEO etc.) as well as for major Joint Operations;
- Precision strike through unmanned (priority one) and manned (priority two) AW and UW vehicles;
- Force protection at sea for the strike component of projection operations, including:
  - ✓ AAW,
  - ✓ ASUW,

- ✓ ASW;
- Force protection while in coastal waters and in port;
- MCM operations in littoral and very shallow waters;
- MIO patrols;
- Support logistics for sustained deployment, including:
  - ✓ Strategic lift,
  - ✓ C4ISTAR,
  - ✓ medical,
  - ✓ fuel,
  - ✓ food.

## Appendix C

### III. Scenario 2

*'High Degree of Multilateralism and political coherence but possessing only a low range of available means'*

**Participants: US (leader) - FR - GRC - DA**

“THE THIN BLUE LINE”

**An Integrated Europe in a Challenging World**

#### 1. SCENARIO BASELINE

The EU has developed as an integrated economy based around the Euro and a coherent foreign and security policy, including an effective ESDP and European command structure. This high level of policy integration has allowed a substantial defence industrial integration. Relations with other international organisations are strong. However, the weak state of the European economy and the rise of new economic competitors have severely limited the funding available to European navies and militaries.

Public opinion supports a common European foreign policy and non military aspects of CMO, but is largely unwilling to support increased taxation or cut-downs on social security systems to provide for greater military resources. As a result, although the EU wields substantial diplomatic and cultural power, its economic leverage at the global level is constrained, and its military reach and capability is limited. European navies suffer from outdated technologies and legacy systems, while adversaries have closed the technological gap. Given their limited resource base, infighting between services for funding is fierce, resulting in failure of a joint approach to military operations.

#### 2. SCENARIO DEVELOPMENT

##### 2.1 POLITICAL SITUATION

*The international economic order has witnessed the rise of China to parity with the United States. Europe, although benefiting from strengths in innovation and quality production, has dropped into the second league of economic power blocks. Russia has made progress in both its military capabilities and economic growth, often at the expense of European export sales. Brazil, India, and a number of niche economies such as Singapore, Estonia and Libya have seen significant development over the past twenty years, and now constitute a powerful third tier of the global economy. The European economy has been placed under additional stress due to the aging of the population, which has severely limited the scope for*

*defence spending, and research and development. Maintenance of the European social model has raised the European income tax to 55% and VAT to 28%. The United States is experiencing a different although equally challenging financial crisis due to the default of its Social Security fund in 2023. Energy supply remains a critical issue for the European economy. The disappointing performance and high cost of technological alternatives to combustion engines has kept oil and gas central to the health and wealth of nations. Europe's main energy imports now derive from Russia, the Caspian Region, and Africa. Several new states have become declared nuclear powers over the past twenty years, while the availability of cruise missile technology has spread. The US retains the world's most capable navy, built around 8 carrier strike groups deploying its squadrons of JSF and old F-18 E/F aircraft. Advancements in UAV technology and air independent propulsion diesel submarines has allowed a number of states, large and small, to deploy effective maritime striking power.*

***The European Union internal market continues to integrate, based on the success of the Euro as the world's first reserve currency since the collapse of the Euro-dollar market in 2012. The EU now numbers 32 members, and operates a Euro-Russian Economic Area agreement, and a Mediterranean Economic Area agreement with the Maghreb states. Institutional reform stagnated after the ratification of the EU Constitutional Treaty in 2008, however the Council President and Foreign Minister positions have been effective in promoting a coherent EU foreign and security policy. EU member state governments remain conservative on fiscal policy in an attempt to balance the costs of the European social model against negative demographics.***

NATO, with 29 members, remains a central focus for collective defence. In addition, all EU members have signed up to the mutual Solidarity Clause of the Constitutional Treaty. European officers are now double-hatted as both NATO and EU functionaries at SHAPE, which now provides both an EU and NATO operational planning and force generation function. National planning headquarters compliment this EU capability, and provide the option for autonomous EU planning where necessary. The EU Military Staff functions smoothly, representing a very close integration of European staff officers.

The United Nations has survived as the most important international organization in the maintenance of peace and stability. Greater cooperation on non-traditional threats by the Security Council (and particularly among the Permanent 12) has given a much-needed boost to global, multilateral approaches to major problems. Resources, however, remain scarce in a time of global economic downturn. The EU has offered forces to a UN on-call rapid response force.

## 2.2 AVAILABLE MEANS

**2.2.1 Rate of Innovation:** The rate of innovation in high technology, biotechnology and advances sciences remains high. As a result, the technological gap between states and regions has diminished. Information superiority is recognized as a prime factor in military advantage. The major militaries of the world have built highly effective, but also very vulnerable, network-centric communications systems.

### 2.2.2 Quantum of Investment:

- General: The financial burden of maintaining in uniform undeployable Cold War soldiers was finally relieved as these troops retired during the period 2005-2020. European land forces are now much smaller. However, the most significant constraint on deployment is a lack of dedicated operational reserve funding for missions. As a result, exchequers exercise a strong chilling effect on the ability of governments to undertake expensive deployments outside the European region. The limited military renewal of 2004-12 brought forward the next generation of European naval platforms; however many of these are now in mid-life, with no current plans for replacements.

- Major Naval Capabilities: European carrier strike capability has seen a slow absolute improvement over the past twenty years, with the commissioning of two UK CVS, one new French CVS, a new Italian CV, and a Spanish strategic expeditionary ship. Europe has lost relative ground, however, in relationship to carrier strike capability improvements made by Russia, China, India, Japan and Brazil. Under the Euro-carrier rotation scheme, the EU can call upon two CVS in 5-30 day NTM (Notice To Move) at any time. These assets are also pledged to the NATO NRF and UN peacekeeping response forces. A substantial improvement has been made in European amphibious capabilities during the 'boom' procurements years 2001-2012; with 8 modern LPDs in the collective European inventory, including 3 with CJTF C2 capabilities. Both European design cruise missiles and TLAM are employed in the European inventory. European navies retain a substantial sea control and sea denial capability, based around multi-purpose FFG/DDG assets, although these are now aging and limited in number. Submarine forces have been maintained at 2004 levels (but at much increased expense). Collectively, these forces allow, at maximum stretch, for the deployment of two European carrier strike groups and two amphibious groups.

- Strike Capability: The collective European naval air arm is effective, but ageing. Escalating costs of the JSF in 2006-10 meant that fewer JSF were purchased than originally intended. Eurofighter and early JSF squadrons are reaching the final decade of their operational life. Increasing costs have forced deadlock on plans a new generation of manned fighter. This issue has been complicated by several spectacular errors made by UAV squadrons in combat during the 2010's, casting doubt on their credibility, and political acceptability. European fleet air arms continue to suffer from a critical lack of MPA and early warning system aircraft.

- Sea Control: European navies have maintained an excellent sea control and MIO capability. Their weakness resides in the limited number of assets available for these missions and consequent force overstretch. European forces continue to lack an effective littoral combat ship. Purchase of the US LCS, was shelved in the European Armaments Agency due to political and Euro-economic considerations.

- Logistics and Lift: Although leasing of civil air and sealift continues, European navies were unable to procure substantial lift capabilities during the period 2005-

2025. As a result, the slowness of the support and logistical train remains the weakest element in European deployability and usability of naval forces. Joint sharing of logistical assets and capabilities has been moderately successful, but is constrained by the needs of the other services.

### **2.2.3 Exploitation of Technologies:**

- General: Application of new technologies to naval capabilities has been constrained by lack of funding. Commercial 'off the shelf' technology has been used extensively. A growing role specialization between European navies, and within NATO, has allowed for limited, specialized application of R&D to naval platforms and systems.

- Intelligence: The EU developed a limited but effective satellite intelligence capability in 2013. But intelligence cooperation with the US and Russia remains robust.

- Interoperability: The NRF has survived as NATO's rapid deployment force, but has not prospered. A gradual slowdown in major NATO exercises, and fewer opportunities to operate with US forces has led to substantial degradation in communications, systems and cultural interoperability across the Atlantic. It is now assumed that European NATO navies will conduct NATO military operations in separate and defined sectors, with US & Canada focusing on other sectors of the battle space. Within Europe, interoperability problems have also arisen. Taking advantage of the Enhanced Cooperation provisions of the Constitutional Treaty, and under the auspices of the European Armaments Agency, a number of European navies have developed shared C4ISR networks that tie them closely together, but separate them as a group for the remainder of EU naval forces.

**2.2.4 Range of Political-Military Options and Alternatives:** Although the EU successfully established an on-call 5000 person Carabinieri-style reaction force for reconstruction operations, there has proved to be no substitute for combat forces in the initial stages of crisis response operations. The ability of the EU to coordinate military, diplomatic, economic, trade and development policies in support of a common foreign policy has been constrained by Europe-wide pressures over unemployment, trade protection and immigration. The rise of the Euro has provided the EU with a measure of economic leverage in crisis situations

**2.2.5 Effectiveness of Market Integration:** Procurement processes improved as a result of increasing European integration. Defence industries merged, leaving only two-three major European players in global defence markets. Oligopolistic pressures and budget constraints have reduced procurement options, while governments have harvested military procurement savings for domestic spending. As a result, military procurement options have been reduced.

## **2.3 THREAT ENVIRONMENT (strategic trends)**

Europe faces a complex threat environment in 2025. The obsessive focus on fundamentalist terrorism during the period 1999-2009 has given way to a more nuanced appreciation of the combined dangers of terrorism, states developing WMD, and the emergence (and re-emergence) of conventional great powers, including maritime powers. A number of middle-sized powers have emerged in the wake of China and the US. The decline of ideological differences, so common in the 20<sup>th</sup> century, has opened the door to strategic realignment, although Europe and the US remain closely bound by trade and financial links. The 'wild cards' of the international order are the internal stability and strategic alignments of Russia, Brazil and India.

**Comment [g1]:** I just wanted to personalise a bit and bring some "salty air" to this phrase

The asymmetric threat has grown in its challenges, even as the frequency of terrorist attacks in the West has declined. Of greater direct relevance has been the extensive spread of instability in Africa (aided by the AIDS/HIV pandemic) and the Middle and Near East, which now witness persistent low-intensity conflicts, and routine political coups. A number of failed states are now 'no go' areas for the international community, and harbour radical and terrorist groups. Organised crime has increased, and has been institutionalised in the state apparatus of many developing countries. Global warming continues, notwithstanding the Kyoto III Universal Declaration on Planetary Survivability. Fresh water scarcity has also increased, leading to tensions and territorial covetousness in the Near East and the Southern Mediterranean. The fighting space of new conflicts is increasingly becoming the centres of large cities. As a result, the need for urban warfare training has become acute. Distinctions between military and police activities have become increasingly blurred.

#### 2.4 SOCIAL DEVELOPMENTS (strategic trends)

The Islamic world's estrangement from the West spread in the years after 2005, even as the incidence of terrorism declined. An anti-Western Islamist creed became a culturally unifying force in the Arab world and further afield, even after the creation of the Republic of Palestine in 2009. This has been particularly strong in the Maghreb, among the 'baby boom' generation of 1995-2010, although the region remains politically fragmented. Increasingly religious and isolationist publics in the US and in Europe have turned their attentions away from world affairs except where questions of morality or principle are at stake, although this conservative generation (now in their 50's and 60's) is under attack by the 're-flower-power' youth movement that was sparked in the Paris student riots of May 2018.

NGOs and the Media have grown in power during past twenty years, and are the lead agents of public mobilization, being the first to call for humanitarian intervention, overseas assistance and the protection of human rights. However, the overall control of the traditional media has declined as people turned to alternative, web-based sources of news and information. As a result, European societies have become increasingly fragmented politically and on ethnic and religious grounds, although a general sense of (now multi-ethnic) national identity has been maintained.

European publics remain sceptical of the use of military force, and will accept few casualties in peace support operations except where those operations have a wholly humanitarian purpose, and no connection to energy issues, or client state relations. The emergence of a socially conscious and idealistic European public has as a substantial constraint on European decision-makers who must also pursue the *realpolitik* of collective interests

The AIDS/HIV pandemic accelerated in Europe in 2016, and is now the subject of intense research, treatment and public scrutiny. In Africa, the armed forces of the most powerful states have been severely weakened by the disease, leaving these states vulnerable to attack.

### 3. FIRST FINDINGS

#### 3.1 CONSTRAINTS AND CONSEQUENCES FOR NAVIES

The first consequence of this scenario is the limited efficacy of naval forces to eliminate the underlying causes of strife. The global increase in low-level violence is not easily addressed through increasingly expensive naval platforms. Conversely, Europe's amphibious capabilities are essential in limiting the consequences of such violence, in providing basic NEO and MIO and shoring up friendly governments under threat.

The second consequence is that a modest European naval force will struggle to compete in a 'multi-polar' world stage occupied by a number of middle ranking powers - states that have re-learned the value of maritime power. In the above scenario, it is likely that one European CSG/ESG will be deployed on a vital EU mission when a crisis breaks, leaving only one or (at maximum stretch) two CSG/ESG forces or equivalents to respond. Peace enforcement via naval means will thus remain a challenge except for undeveloped states, while intervention in a middle-power conflict (e.g. India-Pakistan, Russia-Georgia, etc) will likely be beyond Europe's capability to sustain on its own. The small number of major platforms, deployment tempo, and lack of operational budget surplus resulted in a 'surge' model of deployment, limiting substantially the forward presence of European naval forces.

***The third consequence is that, lacking substantial funding during the period 2012-2025, advancements in joint operations have not been made. While national services work closely together and are effective war fighting partners, seamless integration has not occurred. In particular, army units have not been integrated as potential amphibious assault forces, and retain a solid air-land battle focus. This has the result of leaving most maritime and amphibious challenges within the sole remit and responsibility of the European navies.***

#### 3.2 PRIMARY ROLES FOR EUROPEAN NAVIES

- Limited strike and amphibious operations, as part of peace enforcement and humanitarian intervention, against states developing WMD or illegally exporting missile technologies or in anti-terror operations

- Limited deterrence, reassurance and strategic influence, in a world now repopulated by a number of capable, mid-sized navies transformed to project power "...from the sea" in support of national interests.
- Securing Europe's vital sea lines of communication through presence, control and embargo. MIO, anti-drug, pandemic control and immigration operations.
- Defence diplomacy, aimed at improving local defensive capabilities and supporting stability and reform in areas of strife, while alleviating the need for overstretched European forces to intervene.

### 3.3 INDISPENSABLE NAVAL CAPABILITIES

- Sufficient strike, amphibious and sea control capabilities to allow Europe to play an effective role at its modified Petersberg Task level of ambition or as part of a NATO task force. Sub-requirements include:
  - o Precision strike, with ample capability for precision attacks
  - o Littoral combat capability
  - o Amphibious forces lift and C2 capability
  - o Maritime patrol and early warning capability
  - o Anti-Air and Anti-Submarine capabilities, in support of task groups
  - o Associated logistical capabilities to support the far and sustained deployment of forces where EU states do not possess pre-established shore facilities.
- Sufficient interoperability between European navies, within NATO, and with global partners such as Australia, to allows for the coordination and aggregation of forces where required.
  - o Communications interoperability
  - o Integration of basic procedures
  - o Tactical interchangeability in key war fighting areas (eg cross-decking of JSF aircraft)
  - o Cultural interoperability

**Comment [g2]:** Jim, I spoke to Fragiskos and we thought that the means you described are pretty ambitious for a "low range of means". I don't have a remedy to this – please discuss/stream line this issue within the SG

## IV. Scenario 3

'Low Degree of Multilateralism and political coherence against crucial shortage of available means'

**Participants: BEL (leader) - GE - ESP - FIN**

"EUROPE-LITE"

### 4. SCENARIO BASELINE

EU political integration and ESDP process has failed resulting in re-emergence of separate foreign policies with changing ad hoc coalitions to pursue specific interests. This pattern also has developed in the global international arena, leading to unstable political environment and the impossibility to cope with growing global challenges.

This led to a general hesitation by Member States (MS) to commit one self politically, as well as increasing social fragmentation and rising tension in the public sphere.

The political disorder also has severe impact on the availability of means: Investment is focussed on a national and short perspective and in a competitive manner, resulting in inefficient budget spending within Europe and growing proliferation of defence systems. EU Military forces suffer from budget cuts on the one hand and technologically competing adversaries on the other hand. Although military forces are of crucial importance for nations in such an unstable environment, they are incapable of playing full role due to the lack of long-term strategic development resulting in high risks- that nations have to face.

### 5. SCENARIO DEVELOPMENT

#### 5.1 GLOBAL SITUATION

*EU troops back to Turkey*

*For four days ethnic Georgian Armenian groups attacked and killed four EU troopers in Javakheti region. Several diplomatic sources confirm that seventeen EU Member States decided immediately to redraw their troops within the EU borders of Turkey. EU's military adventures will be severely curtailed. In addition, the wing of the antiwar movement that opposed an invasion and occupation of Georgia is now followed by all EU Politicians who not only didn't oppose, but in fact supported critical steps taken by the EU administration to prepare for an invasion and occupation of Georgia. Today the EU Minister of Defence Will*

*Watson and the military Chief of Defence Gen Dumoulin resign after they assumed office 6 months ago.  
Reuters 20 Jan 2015.*

#### 5.1.1 *The political situation*

*Existing and emerging alliances*

***Political disorder has increased globally affecting especially Africa, the Middle East and South East Asia. Functioning of international organisations, governments and treaties have been hampered severely, resulting in a political disorder in the global international arena. Non-governmental organisations are competing the UN in setting the international political agenda.***

**The United Nations (UN)** has not been sufficiently reformed resulting in rising inefficiency; it still forms the basic legal framework for international relations, . However ad hoc treaty arrangements are used in order to compensate difficulties encountered within the UN. Credibility of the Organisation for Security and Cooperation in Europe (OSCE) has also decreased. The lack of a rule-based international order caused nations to pursue their foreign policy either unilaterally or seeking ad hoc coalitions.

Increasing disputes over policy, funding and military structures resulted in rising tensions within the military community as well, although **NATO's** core role, as collective defence organisation remains untouched. Out of area intervention and stabilisation operations are hampered and rarely executed as a whole. NATO has evolved into a key clearinghouse for variable geometry coalitions.

The **EU** political integration including the ESDP has failed and the EU is thrown back to the status of a Common Market. Successive enlargements created new dividing lines and hampered the correct functioning of the EU institutions. The EU remains nevertheless an integrated supra national economic institution but political weakness causes most countries to seek partners in variable European coalitions or to foster relationships with US and regional powers on a bilateral basis. Pressure from the public opinion causes hesitation of MS to commit themselves in international affairs except in pursuit of well-perceived and clear national areas of interest. In such cases, economic leverage and humanitarian means are first choice.

***The US is acting as a global military power. Because of rising international tensions and the weakness of international organisations, the US is fostering ad hoc coalitions depending on varying areas of interest. The US is geopolitical concentrating on the pacific area. Where Russia, after a phase of social and economical reconstruction, has gained regional power status and wants to be an active global player again as other emerging powers: China and India***

#### 2.1.2 *Means*

*Indian navy ships for the UK*

*Yesterday the New Telegraph reported that the Indian Shipyard Thalik sold 10 multirole offshore patrol vessels of the Ghandi Class to the UK Navy. These vessels can be equipped with the well known HA XK2 containers for humanitarian Aid operations. The total cost of the program is largely covered by the recent sale of two AAW frigates and the CVS Prince of Wales to Brazil. This is the first of a serial of projects in achieving the transformation goals as described in the new Defence White paper.*

*Jane's Defence Weekly January 2025*

Due to the change in political interest, national budget spending is focussing primarily on social and internal security issues. European countries are more focussing on preventive diplomacy and economical cooperation in order to influence global security. Defence budgets are declining and remain under 1% GDP. Budget planning is unreliable and investments are focussed on short term. As a result of the low level of (domestic) defence budgets, European armament industries have been forced to concentrate seeking their advantage in the growing defence market of new regional powers.

Consequently, European military forces have less influence on the design of defence systems. Furthermore, they can't afford following the overall tempo of technological development. Most Allies are unable to match the financial and organisational challenges of transforming their own forces to interoperate seamlessly with those of the US. Other MS, wishing to maintain a significant influence on US strategy and operations, are concentrating on offering frontline capabilities that complement US capabilities and are able to interoperate, at least in some selected capability areas. Some MS struggle hard to uphold national deterrence and missile defence, that will affect negatively their other capabilities.

Based on its large domestic market and research spending, the US Defence industry has increased its global dominance. But emerging armament industries in regional powers provide increasing competition, mainly in the medium technology areas

Military use of new technologies, such as biotechnologies, has been legally restricted in most of the western states.

## **5.2 STRATEGIC TRENDS**

*European fleet sailing for Bangla Desh*

*During a short ceremony in the Brest Naval base The fleet "Destiny Hope" consisting of a French Heli carrier, two Norwegian multipurpose escort ships, a Belgian/Netherlands logistic support ship and a Danish RoRo ship - in total 500 navy personnel and 400 civil experts and medical teams - are waved out to support the latest Humanitarian Aid operation in Bangla Desh. An enthusiastic crowd supported by more than 1000 young children coloured the ceremony.*  
*Newsweek December 2025*

### 2.2.1 Threat environment

The EU faces new areas of tension in 2025.

**Increasing instabilities in Africa, the Middle East and in the SouthEast and central Asia.** Sub-Saharan Africa faces severe challenges caused by an increase in population, poverty, diseases, hunger and poor governance creating a breeding place for political radicalism. Furthermore, failed states in Africa have become a safe heaven and training ground for terrorist groups. The worsening situation calls western countries for humanitarian support, including through military stabilisation operations. The Middle East and the Persian Gulf are still regions of concern due to regional conflicts, the growing Western dependency on Gulf oil and the presence of autocratic regimes. In South East Asia, the development of the Islamic separatism, the growing regional militarisation and the absence of a functioning regional security system aggravated the instability in the area. New security concerns emerge in the Caucasus and Central Asia due to fossil fuel exploitation and weak governance.

**Increasing organised crime, powerful multinational companies, evolving political lobbying groups interfere in the global international arena.** Due to the inefficiency of international rules and export control arrangements, proliferation of weapons and new technologies is increasing. Some governments don't hesitate to transfer advanced technologies to emerging regional powers for economical interests or political reasons. Criminal activities as well as illegal cross-border traffic of weapons and technologies have considerably increased resulting in WMD powers to emerge and close the technological gap with western nations.

**The asymmetric threat has grown.** Terrorist or extremist groups are exploiting co-operation with organised crime and have adopted unconventional means and new technologies to some extent, reaching increasing destructive power. It remains a key challenge to state power, particularly through its ability to use asymmetric attacks to by-pass military security and attack states 'at home'.

**Worldwide competition for scarcer natural resources and instability on the international area are challenging economical development of European nations.** Oil and Gas remain available but at very high costs due the increasing demand of China and India. EU oil and gas import will account for about 70% of energy consumption in 2025. Pipelines transiting unstable regions introduce new vulnerabilities especially in the Caspian basin and North Africa. Niche mineral resources rose to strategic importance resulting in increasing competition on the international areas.

Despite medicinal advancement, particularly in biotechnology, **epidemic risk** has been steadily growing and both chronic and infectious disease remains a significant drag on human well being. In Africa, the sheer prevalence of disease threatens social structures.

**Pollution concerns have risen in the last decade** and pollution caused by accidents is not tolerated. Some MS are investing in reducing pollution while other countries are further damaging the environment. This creates a new source of tension between nations. Furthermore pollution could be used as a weapon.

### **2.2.2 Social Developments**

Third world countries stagnated and only very few succeeded to further develop their economies and build up industrial capacities. Accordingly, migration to western countries has increased during the 2 last decades. North Africa, the Middle East and most of East Asia are facing further increase in population but failed to expand sufficiently their own economies to employ the forthcoming working age bulge. On the opposite side, the western world ageing population is demanding increased social welfare provision and western economies are relying on the potential benefits of immigration, trying to canalise it accordingly.

Global pressure on national cultures causes social tensions and instability within conservative societies. Western culture remains dominant and western values are still spreading, resulting in delimitation and resentment. Extent of the disparity between developed and developing nations become ever clearer due to unrestricted information flow and globalisation of the media, thereby exacerbating internal tensions in EU MS and encouraging worldwide dissatisfaction, resentment, migration and even terrorism.

Due to the increasing asymmetric risk, the lack of visibility in the international arena and a growing zero loss mentality in European societies, European politicians hesitate accordingly to commit armed forces in high risk and major conflicts. On the other hand, due to the public awareness of humanitarian disasters in Africa and other areas, public opinion is calling more and more for humanitarian intervention and assistance overseas.

This goes in hand with a greater demand for legitimacy regarding military operations and a great emphasis on human rights. UN mandates remains the basic prerequisite to justify Western action. Western public opinion favours the expansion of international law especially in areas such as imprecise weapons, lethal weapons and directed energy and blast weapons. Their focus on post-conflict stabilisation missions extended to encompass also environmental impacts. Although adherence to international law proves unreliable with doubtful controlling, international regulations increasingly impact domestic law and hence the operational conduct of the Armed Forces.

## 6. FIRST FINDINGS

### 6.1 CONSTRAINTS AND CONSEQUENCES FOR NAVIES

Future theatres of operations will be limited and operations will be increasingly focused on nearby European regions. The EU will concentrate on operations in the lower spectrum of PETERSBERG tasks, although crisis management operations generally get increasingly risky and dangerous.

Furthermore the armed forces have to concentrate on humanitarian disaster relief and evacuation operations.

Due to the increasing migration, smuggling and environmental concerns, European Navies have to support Coast Guard operations and constabulary tasks, on their own and in co-operation with governmental agencies.

Multinational intervention or stabilisation operations are conducted mostly by coalitions of the willing or unilaterally by more powerful regional actors, such as China, USA or India. Time-consuming coalition - building and the lack of contingency - planning have resulted in delay of military employment with the consequence of exposing forces to increasing threats. While global powers (US, China, Russia, etc.) manage to hold up forces for the whole spectrum of military tasks, many of the European allies have to concentrate on stabilisation and support capabilities.

Due to the unstable international environment and global disorder, Some MS need to focus on their interests and responsibilities in their overseas territories.

European Navies have to act either independently or within ad hoc coalitions, but lack full interoperability. Interoperability will be mainly limited to communications and existing data link systems.

As a result of the reduction of the military budgets and public R&D investments, military forces are forced to specialise and concentrate on niche capabilities in order to ensure a minimal contribution to NATO or US operations. Navies' capabilities among European nations extent from strategic capabilities in some few navies to conventional but wider spread capabilities to cope with CMO in low risk environment.

Pressures from the political world and constraints on the national budgets are calling for more integration between services and more "jointness" within defence. Furthermore public want to take more benefit out of the armed forces to support civilian duties during the peacetime. Naval assets are limited and mostly outdated. European navies are ever more unable to procure assets specifically designed for their defined operational needs. Navies seek to close the gap between national level of ambition and available means by versatile, modular assets on the basis of off-the-shelf civilian standards as well as innovative procurement procedures

(leasing, private funding, outsourcing, etc). In that way, military procurement planning is more and more compromised, leading to rising risks that navies have to face in case of employment. On the other hand, innovative procurement procedures might result in legally restrictions to employ assets out of national areas.

Defence Budgets are not sufficient enough to face the recruitment problems caused by ageing population and the higher degree of education in EU. These budget constraint results also in attracting lower quality of recruits and hamper the education and training standards of the armed forces. Furthermore military service contracts have to be more in line with existing civilian standards.(see last sentence)

The increasingly litigious nature of society will probably see a further increase in compensation claims by Service personnel, and of civilian processes running in parallel with military judicial mechanisms.

In order to compensate those effects, navies are forced to rationalise organisation and reduce personnel

## 6.2 PRIMARY ROLES FOR EUROPEAN NAVIES

Primary roles are divided in traditional and rising civilian tasks:

- Home Land Defence (i.e. presence, surveillance and protection of maritime approaches and SLOC)
- Contribution to Low intensity Crises Management Operations in ad hoc coalitions.
- Contribution to national solidarity i.e. Constabulary tasks, pollution control, marine research, logistic and personnel support)
- Contribution to international solidarity i.e. Disaster relief and humanitarian operations worldwide
- Contribution to collective defence (NATO/coalition and other collective security arrangements)

## 6.3 INDISPENSABLE NAVAL CAPABILITIES

Due to the decreasing defence budget spending, European Navies are forced to integrate into joint structures and to establish co-operation procedures with civilian's authorities. Additionally new financial resources and alternatives procurement procedures will be of rising importance to hold up the necessary naval capabilities.

Effective engagement: Navies will have to concentrate on homeland defence and deterrence capabilities. The contribution to national solidarity will require the development of coordination cells, new procedures and tactics including legal aspects to improve interoperability with civilian and maritime authorities

as well as the procurement of new systems (non-lethal weapons, CBRN defence,...). Low cost datalink solutions (e.g. broad band Internet) need to be encouraged. They are the backbone of the civilo-military co-operation (CIMIC). Furthermore new capabilities are needed to assist disaster relief operations and deliver adaptive logistic support for humanitarian operations. In addition, Navies will have to improve MIO capabilities and keep limited surveillance escort and MCM capabilities aiming at the protection of the national SLOC

On the other hand strategic projection forces no longer represent the focus of capability development due to political concentration on defensive force structures and budget constraints.

An improved deployability and mobility especially for assisting humanitarian disaster relief operations and low intensity CMO will require new transport capability to deploy patrol ships into the SOA and sealift capabilities while supporting joint forces.

Although protection and survivability are major capabilities to overcome public zero-loss mentality, concentration on low risk CMO operations will permit to limit the extended area defence for AAW and ASW. Capabilities should focus on asymmetric risk, self defence and effective naval fire support capability with precision guided ammunition aiming at minimising collateral damage

Intelligence, Surveillance, Target Acquisition and reconnaissance (ISTAR) are extremely important for SLOC surveillance and the navies' support to coast guard tasks. These operations require integrated surveillance capabilities for establishing a coherent RMP with military and civilian authorities.

With regard to Command Control Communications Computers and Information (C4I) capability, only limited interoperability with other navies is required. It should be focused on existing communication and data links. Interoperability with civilian authorities, other services and NGO's need to be developed.

New capabilities as Tactical mobility capability are to be developed to support land operations in littoral waters and sea basing of logistic capabilities in support of humanitarian and disaster relief operations

## Scenario 4

*'Low Degree of Multilateralism and political coherence but with a high range of available means'*

**Participants: POL (leader) - GBR - IRL - POR- SWE**

### **"A RETURN TO RIVALRY"**

#### V. SCENARIO BASELINE

*Although the EU remains a robust global economic power, the vision of a EU political union with a common foreign and security policy has stalled, with the inevitable result that ESDP is now dormant. Intensified market integration leading to the successful development of the EU into the world's most advanced economy has provided the resources for substantial development of national military and civil crisis management capabilities, with the result that several European states now command global military reach. This rise in national capabilities has encouraged governments to pursue unilateral external defence policies including shifting coalitions. Public opinion generally supports this development since additional military funding is provided out of economic growth and also out of a renewed sense of intra-European competition in the external sphere.*

#### VI. SCENARIO DEVELOPMENT

##### **1. POLITICAL SITUATION**

*"'It's been a nightmare' – Han Mutomba – the world known globetrotter said yesterday at the press conference following the end of his bike trip around the world – 'Even with the assistance of Microsoft Motors I sometimes had to wait hours at the borders before the formalities were completed'." – The Adventurer, 27 May 2025.*

The economy has become the single biggest driving factor influencing the situation throughout the world. International cooperation exists only where and when profits can be foreseen. There is little concern for events outside national borders, except where they might threaten internal prosperity or stability. The EU and the NATO still exist but it has been 10 years since an agreement on any significant common policy or action has been achieved. There is little harmonization of US and EU foreign policies, the US practice being to enhance bilateral links with selected European countries as common interests arise. Occasionally some interest-oriented alliances arise to conduct intervention, but are usually limited to humanitarian missions, and more often than not carried out via NGOs. In the few cases where military forces were employed it was of limited duration and relatively low-risk. Since the unexpected failure of the single European currency the US is less concerned about competition from Europe but maintains transatlantic links on a bilateral basis. Keen to strengthen their positions within the fierce economic climate many European states look for partners amongst other world powers (Russia, China, India,

Japan). Some countries that traditionally rely on trade, are more affected by the isolationist policy adopted by the key players within the EU, and are forced to establish individual arrangements with fellow EU countries. With the asymmetric threat ever-present and economic competition being fierce, distrust and isolationist tendencies have grown. Issues of maritime jurisdiction and the exploitation of natural resources have grown to open dispute between some adjacent EU member-states, and counter-claims over areas of the Continental Shelf seem intractable. There have been accusations that measures taken for “homeland security” are affecting free trade and movement, and suspicions that they are being used as a form of economic sanction. However, big trans-national corporations have grown to be mega-companies – their economic power and political influence meaning that they have become effectively exempt from the tight security on national borders, unlike potential competitors.

## 2. MEANS

*“The Secret Uncovered’ – Finally we can have cell phone implants! Although the technology enabled it already 15 years ago, there was a question of power – battery. There were rumours that some kind of implant device enabling use of human body electricity had been developed in China but if so, it was a well guarded secret. The WorldCom has just announced that their tests with BIOBATT were a success and that the first implant, bio-powered cell phones will be available next month.” – World of Science, 10 March 2025.*

*The globalisation of industry and business, and the consequent economic growth, resulted in rapid technological development. Powerful trans-national corporations having access to vast resources lead the way in research and technological advance. Some nations have managed to retain their national scientific research capabilities but in a climate of distrust, trans-national cooperation is limited. Although limited in their ability to compete with the mega-companies’ works some states were able to develop milestone technological solutions. Unwilling to share these advances with the remainder of Europe, countries have reached differing levels of development resulting in considerable industrial espionage.*

With public opinion becoming increasingly risk averse but at the same time calling for increased security, the armed forces of individual European countries have developed complex weapon and combat systems technologies to combat the threat, (unmanned vehicles, precision strike, increased defensive capabilities, advance surveillance and detection systems). Although procured through global defence contractors, the failure to share information has resulted in systems that are only optimised for their own forces resulting in an extremely low level of interoperability throughout Europe. Equally, keen to share industrial risk and not limited by resources, governments have started to rely more on hired contractors, especially for simple or non-combat duties (logistics, humanitarian assistance, transport, medical support).

The access of European states to natural resources is uneven – some countries maintain control over significant deposits while others are essentially their clients – hence local “alliances” to ensure a market to the provider and a supply to the customer have developed.

### 3. THREAT ENVIRONMENT (strategic trends)

*“The False Alarm Frustration’ – 25<sup>th</sup> false alarm this year. Two days ago the Mayor received anonymous information that the city’s water supply was biologically contaminated. Although the emergency reserve was enough to provide the citizens with drinking water, there was no bath for two days. Today the local Chem-Bio Threat Response unit has completed the tests – ‘The water is pure, it was a false alarm’ – chief Ivan Brown said.” – Lucerne News, 2 August 2025.*

*Although there is much distrust and discord between the European nations, as well as with the other World powers, the disputes and conflicts are predominantly played out on the economic battlefield. Public opinion prevents the use of military or any other force on a large scale. This aversion to act must be placed in a context of the collective and individual relative wealth, freedom and peace enjoyed by most European citizens. A generation exists across the EU that knows nothing else, and in many member states several generations. Hence the risk of conflict outside of the poor regions is low.*

*On the other hand, the population of the poor regions of the world, living in deep misery and with little hope of changing their fortunes, are growing increasingly desperate and capable of extreme actions. In this atmosphere, rumour and conspiracy theories of plans by the world powers and/or global corporations for political, economic, religious and cultural domination, find a willing audience. With the above the risk of an asymmetric threat (terrorism) has increased. These attacks might not be limited to a direct use of force (weapons) but might feasibly also include indirect attacks in the form of interruption of power and other supplies, transportation disruption, disinformation, false threats, etc. In the age of global media and information technology the target of an attack is rarely the only objective, the resulting publicity to “the cause” and credibility gained by the perpetrators –particularly with their “home” audience being the real prize.*

*Besides the threats of deliberate man-made violence there are always threats that are either natural occurrences or as a result of man’s benign action or indeed inaction. Some of these are beyond any control (natural disasters, disease) while others could be at least eased if sufficient will existed (pollution, global warming, epidemic, famine). Although some of the richer nations may have implemented measures to militate against these risks they may still happen on occasion. There is also potential for a biological threat, either deliberate, or equally likely from the poor countries, where inoculation control and basic hygiene is considerably inferior to that found in the developed countries. Ironically, the distrust and lack of openness between the European nations has played a positive role in countering this threat with increased security and border control procedures reducing the spread of uncontrolled diseases.*

### 4. SOCIAL DEVELOPMENTS (strategic trends)

*“Is That A City Or A Border Post?’ – Another 20 families were forced to move out of their homes to new luxury houses in the suburbs as the Homeland Protection Authority took over another building in Aachen. The border administration in the city was already one of the biggest institutions of that kind in the world, and after the current enlargement*

*it will employ over 10 thousand personnel. Is Aachen still a city or is it just a vast Border Post?” – Aachen Daily, 1 June 2025.*

*Over the last few decades the “Western” style of life and the career rush has led to a demographic trough in the European countries. As a result the populations are steadily growing older. Social programs employed in some states are considered to be successful but the effects have yet to come to fruition. Generally, in order to meet workforce needs, the governments of European nations have had to accept immigrants. Like in other areas, views and policies have varied from country to country – with different approaches to immigration and immigrants being employed by different states. However a common theme amongst the European Nations is that immigration is solely dependent on the countries economic requirements, and that there is therefore no requirement to grant immigrants full citizenship. As these numbers of immigrants increase as the population gap bites, societies are becoming increasingly fractured with a social divide between the haves and the have-nots. Human rights on a global scale have taken a step backwards, with the UN in disarray and the European Court of Human rights effectively ignored, countries are primarily concerned with their own citizens and only apply the barest minimum of care to their immigrant population. Second and third generation immigrants who contribute significantly towards the economy are keen to be included within the main populace, and it is possible that when their numbers reach a critical mass “economic nationality” will replace ethnic nationality.*

The development of information technology has resulted in a further globalisation of the media – there is an easy access to information, hence the media are even more powerful, and potentially manipulative in their own interests, or manipulated by others. Additionally economic development has profited also (or maybe even most of all) the global media corporations. They have the means to be omnipresent and omniscient. Any undertaken activity must always be analysed to foresee how it would look in the media. Hence there is general support for humanitarian activities but with a zero-loss mentality it preferably should be done by someone else’s hands – people and governments are eager to give financial support to NGO’s.

*As much as the media is powerful it is also influenced by the nationalism. The international law is generally observed, or at least appearances of that are being given, still the national law (or national interest) is considered superior. Additionally each nation individually, driven by its economy, searches for new markets. The above results in frequent disputes or tensions between nations, however they have not yet become military issues but are limited to economic and diplomatic measures.*

## VII. FIRST FINDINGS

### 1. CONSTRAINTS AND CONSEQUENCES FOR NAVIES

*“The HAS ‘Africa’, operated by the ‘Helping Hand’, world leading humanitarian organization, has sailed yesterday into the port of Chisimayu, Somalia. Thousands of lives will be saved when ship distributes her water and food supplies to the population. The “Africa” is the biggest and the most modern of the 20 vessels strong fleet of the ‘Helping Hand’. The Chismayu relief is the ship’s 10<sup>th</sup> operation in her 2 year long history.” – CNN online, 10 July 2025.*

With the level of multilateralism being low and the cohesion of international organisations (UN, EU, OSCE, NATO) having been severely weakened, interoperability and cooperation between navies of different states is extremely limited (only some regional or dependency based alliances remain effective). At the same time economic growth has provided significantly greater resources for military use. Military needs and priorities are driven by their contribution to the expansion and/or protection of the national economy. Since maritime transport is the cheapest and the most efficient, greater maritime security is an almost universal requirement, as are expanded constabulary tasking. This has resulted in navies aspiring to having a full scope of capabilities independently. However not all nations are able to achieve that independently, and despite bi-lateral cooperation and local alliances, even the larger navies face force overstretch. Although funds allowed for significant technological development of forces, the zero-loss mentality and general unpopularity of military duty, in booming economies have resulted in recruiting problems, which are a serious constraint to any military build-up. As a result much of simple, non-combat activities were outsourced to hired contractors – ironically many of the contractors are owned by big trans-national corporations.

Although there has been a significant evolution of information technology, limited international cooperation has led to a reduced exchange of intelligence. With terrorism and the asymmetric threats being the most important issue, and the means to enable early detection seriously degraded many countries have switched their focus to developing comprehensive HUMINT.

While the European market and markets of the world powers have little room for new investments the markets of the poor regions are grounds for economic competition. The rivalries lead to frequent disputes and occasional bend of international law. Having no international support the wronged side is unable to find justice – unless there is a serious offence in the face of the international law other countries do not intervene in such disputes.

Paradoxically the lack of international cooperation has not driven the land, sea and air components to work more closely together; in fact the converse is true. Having large budgets, and thus not being forced into Jointness to save money by avoiding the doubling of capabilities, services of nations have been allowed to develop individually reducing their interoperability still further.

## **2. PRIMARY ROLES FOR NAVIES**

*As the asymmetric threat is the greatest danger to a state population, and at the same time there is little cooperation between nations, every country's military focuses first of all on its own national security. That would include homeland security, constabulary duties, maritime domain awareness, and national defence. Although some nations have the global reach to protect their national interests (particularly trade) worldwide, for most, the area of interest and operations are confined to the local or regional.*

*In addition to national security the need to protect the economies key tenets, overseas interests and lines of communication, drives the policies for the individual militaries. Since transport by sea is still the cheapest and the most efficient option protection of the sea lines of communication is an enduring task. Equally the overseas areas require a degree of protection hence many of the more affluent countries have retained an expeditionary capability to sustain their forward presence.*

Even though the risk of a global conflict is deemed to be low some countries have retained their strategic deterrence.

### **3. INDISPENSABLE NAVAL CAPABILITIES**

The above roles required navies to have the following capabilities – to a greater and lesser extent, in each case – which are duplicated internationally and sometimes also nationally:

- local, regional, global surveillance and intelligence;
- flexible global reach and remote sustainment;
- local and forward deployed defence capability;
- special capabilities (network centric warfare, special forces);
- maritime force projection (effective engagement).

Since there are sufficient resources available to have a full scope of capabilities there is little requirement for cooperation with other national services, agencies or international organisations. However some interaction exists, and hence limited interoperability remains.

With the increased use of hired contractors, navies are not tasked with some traditional naval duties anymore (sealift, logistic support, medical support, force protection, humanitarian relief) but still having some expertise and having the means navies retain the ability to perform some of those task on a limited scale.

Appendix F  
List of major naval functions / supporting roles of European Navies

**1. Constabulary Duties**

	<b>Scenario 1</b> +/+	<b>Scenario 2</b> +/-	<b>Scenario 3</b> -/-	<b>Scenario -</b> /+	Year 2005
Regional Presence	1	1	3	3	2
Regional Surveillance and Protection of maritime approaches	1	2	3	3	2
Joint operations	2	2	3	1	1
Combined operations among European navies	3	3	1	1	2
Combined operations with other navies	2	2	1	1	2
Interagency cooperation	3	3	3	1	1

**2. Naval Participation in Defence**

Collective defence	3	3	2	1	2
Defence of European Strategic interests abroad	3	2	0	3	1
Joint operations	2	2	3	1	2-3
Combined operations among European navies	3	3	2	1	3
Combined operations with other navies	2	2	2	1	2
Interagency operations	3	3	3	1	1
Civil-military operations	3	3	3	1	1
Sea Control/Protection of SLOCs and choke points	3	3	1	3	3
Deterrence	2	3	1	3	1-2

**3. Force Projection**

Maritime Interdiction Operations	3	2	1	2	2-3
Crises Management Operations	3	2	2	2	2

Enforced Entry Operations	3	3	0	3	3
Strike Operations	3	2	0	3	2
Joint operations	3	3	3	1	2
Combined operations among European navies	3	3	3	1	3
Combined operations with other navies	2	3	3	1	3
Interagency operations	2	2	2	2	1-2
Civil-military cooperation	3	2	3	2	1

#### **4. Defence diplomacy**

Maritime cooperation	3	2	1	2	3
Naval presence	3	1	1	3	2
Interagency cooperation	3	3	2	3	1

#### **5. Technical and Humanitarian Assistance**

Aid to civil power	1	1	3	1	1
Humanitarian Assistance	2	2	2	1	2
Joint operations	2	2	3	1	2
Combined operations among European navies	3	3	2	1	1-2
Combined operations with other navies	2	1	2	1	1-2
Interagency operations	3	3	3	2	2
Civil-military operations	3	3	3	1	2

( 3: primary role 2: secondary role 1: marginal role)