



## **Sea Basing**

**"The Sea as a Base for Joint Operations"**

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## **Initial Concept**



Federal Ministry  
of Defence

**Chief of Staff, Bundeswehr**  
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VISITING ADDRESS Stauffenbergstr. 18, 10785 Berlin  
MAILING ADDRESS 11055 Berlin

Tel +49 (0)228-12-4729/7482  
Fax +49 (0)228-12-5041  
E-mail [BMVgFueMIII1@bmvg.bund.de](mailto:BMVgFueMIII1@bmvg.bund.de)

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I hereby issue the  
**Initial Concept**  
"The Sea as a Base for Joint Operations"  
**(Initial Sea Basing Concept).**

For the Federal Minister of Defence

Wolfgang Schneiderhan

General

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## 1. Purpose and Aim

German servicemen and women are currently deployed on three continents and to distant maritime areas. They are a visible expression of the fact that defense in the context of the German constitution can no longer be limited to national Homeland defense. Therefore, it must – and already does – start by addressing the sources of risks and threats to the security of Germany and its allies. Conflict prevention and crisis management operations, including the fight against international terrorism, thus determine the capabilities and structure of the Bundeswehr.

In the future, Bundeswehr missions are to be generally conducted in a joint and combined environment. A strong maritime component will be required especially when the theatre of operations (TOO)<sup>1</sup> is located in the littoral or can only be freely accessed from the sea. It is therefore important to exploit the sea or the deployment, operations, sustainment and redeployment of friendly forces.

Already in the past, especially the Army and the Navy have already cooperated in a maritime environment under operational conditions. Examples are the evacuation of own ground forces from Somalia in 1994 with frigates and logistic support ships<sup>2</sup>, the prepositioning of a combat support ship off Ivory Coast in 2005 in the event that an evacuation should be necessary, the support provided by a combat support ship to the land-based humanitarian assistance operation in Indonesia, and the short-term integration of a combat support ship with selected logistic capabilities into the Joint Logistic Support Group of NATO Response Force (NRF) 7<sup>3</sup>.

The European Union Battlegroup (EU BG) Concept refers to naval forces as *force enablers*<sup>4</sup>, however without further specification. Accordingly, the Navy has initiated the formation of a

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<sup>1</sup> The terms *theatre of operations* and *theatre* will hereinafter refer to the area defined by the national mandate in which German armed forces conduct their operational mission. As a general rule, the theatre of operations consists of the theatre base and several areas of operations (AOO) as required.

<sup>2</sup> Operation SOUTHERN CROSS with frigates *Köln* and *Karlsruhe*, fleet support ship *Nienburg* and oiler *Spessart*.

<sup>3</sup> During the standby phase from July to December 2006.

<sup>4</sup> Force enablers: Forces that create vital preconditions for follow-on operations and thus enable the latter.

temporary multinational Maritime Task Group (MTG)<sup>5</sup> under German leadership. The capability spectrum of the MTG is adequate to support an EU Battle Group. The EU MTG is neither an integral part of the EU BG, nor an amphibious task force capable of transporting and landing the entire EU BG.

The aforementioned examples and the initiative of the EU MTG illustrate the added value which is gained from a maritime component during joint operations and which may extend across all capability categories and all phases of an operation.

This Initial Concept

- outlines the gain from using the sea as a base for operations ashore, based on the distinctive features of naval forces.
- describes existing capabilities in this context and
- identifies starting points to further develop sea basing for joint operations.

It aims for a common understanding of the sea as a base and identifies ways of how to make better use of the capabilities of naval forces within the framework of joint operations. It is therefore essential to further develop them jointly.

**2. Politico-Security and Politico-Military Relevance** The Bundeswehr is an instrument of a comprehensive multilateral conflict prevention and crisis management policy which also includes the willingness and capability to eventually protect, enforce or restore freedom and human rights as well as stability and security with military means. The White Paper 2006 emphasizes the necessity to take preventive action against any risks and threats to our security and to address them timely at the places of origin. In this context, it may become necessary to use military power in accordance with international law at a very early stage to prevent crises, settle conflicts or

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<sup>5</sup> Depending on the respective mission, it is composed of combat vessels (frigates, corvettes) and logistic

prevent terrorist groups from launching asymmetrical attacks.

Two thirds of the world population live within a 60 km wide strip along the coast<sup>6</sup>. Although most conflicts are decided on land, conflict prevention and crisis management frequently have indeed a maritime dimension. The employment of naval forces is often the only guarantee for a free use of the seas and for an access across the sea. They allow the seaborne engagement of targets ashore. By employing naval forces in both national and multinational environments, military presence can be established in the immediate vicinity of the landward joint operations area (JOA)<sup>7</sup>, also as an expression of political determination (show of force). This applies especially to those cases where an employment of ground and air forces is – for political, military or other reasons – temporarily impossible or only possible by accepting a high risk. In the future, the naval forces of the Bundeswehr therefore have also to be capable of conducting sustained multinational operations under threat over a longer period of time off foreign shores far away from Germany<sup>8</sup>.

Also in NATO and the EU, there are substantial efforts to provide additional capabilities for *expeditionary operations*<sup>9</sup>. The Combined Joint Task Force (CJTF), NRF and EU BG concepts underpin the relevance of the military contribution to international conflict prevention and crisis management worldwide and follow the approach of employing rapidly deployable, relatively small and highly flexible contingents which are able to accomplish missions limited in space and time.

The percentage of support elements of the Joint Support Service (a.o. command support, logistics, military intelligence) and assets of the Bundeswehr Medical Service in operational

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support or amphibious ships, ship borne helicopters and medical capacities.

<sup>6</sup> This share is continually increasing; cf. UNESCO, *Environment and Development in Coastal Regions and in Small Islands*, Info 54. <http://www.unesco.org/csi/pub/info/info54.htm>.

<sup>7</sup> The term *joint operations area* (JOA) will hereinafter refer to the area assigned to the Joint Force Commander to conduct an operation. For the Bundeswehr, the JOA may be specified by a mandate of the German parliament (Bundestag).

<sup>8</sup> Cf. White Paper 2006, p. 131.

<sup>9</sup> Cf. NATO AAP 6: Expeditionary operations: "The projection of military power over extended lines of communications into a distant operational area to accomplish a specific objective." *Expeditionary operations* are usually oriented towards a limited military objective. As a general rule, they are limited in duration and have to be conducted without Host Nation Support. Sustained operations where troops establish themselves in a country on a long-term basis, where camps are set up and where several

contingents tend to increase the smaller the overall scope of the operation is. Many of these capability components can, depending on the situation, be provided by sea-based forces and thus reduce the number and size of land-based forces and facilities for this purpose in the JOA (footprint ashore). Embarked personnel, for example, are given additional protection<sup>10</sup> by the ship's crew. Special infrastructure measures for accommodation and service support are not required.

A limited size of forces ashore may also be required for political reasons. Increasingly, the aim is to solve problems by involving regional security organizations and to avoid a visible supra-regional influence. The African Union has developed such a concept termed as *African Ownership*. Its aim is to have African conflicts settled by African countries. Only when their capabilities are inadequate, they will mainly ask for external technical assistance. The long-term, visible deployment of non-African troops shall be avoided whenever possible. The possibility of providing selective localized support by sea-based forces in the littoral<sup>11</sup> represents a flexible military option in this context.

All these considerations also apply equally to national military evacuation operations and initial-entry operations which require swift action and where access is possible only across the sea or where an alternative path can be followed only with an unreasonably high risk or great effort. For this purpose, the Bundeswehr requires in the future the capability to deploy complete and operational contingents across the sea.

The operational *level of ambition* associated with a national military evacuation mission (1,000 servicemen and women) is to serve as the conceptual and planning basis for the commitment of

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contingents have been employed already, are no longer *expeditionary* in nature.

<sup>10</sup> Force protection measures.

<sup>11</sup> The term *littoral area* refers to the zone, which extends approximately 200 km inland and seaward each along a coastline. This figure is based on the effective range of sea-based sensors and weapons as well as the penetration range of helicopters and drones. The effect to be achieved with them will naturally be reduced in character and scope and change as the distance increases. In addition, this tendency will grow as a seagoing platform moves away from the coastline.

forces. This approach also appears to be suited to make substantial contributions to multinational task forces such as the EU BG. A task force must, among other things, be capable of accomplishing tasks such as initial-entry operations, military evacuation operations and disaster relief/ humanitarian assistance.

### **3. Conceptual Outline of Sea Basing**

#### **3.1. Characteristics of Naval Forces in Support of Joint Operations**

Naval forces<sup>12</sup> benefit from the special legal status of the high seas. They can be deployed to distant regions and be kept ready and flexible for an extended period of time without diplomatic notification or the political consent of a nation. Only naval forces are able to maintain a sustained presence in international waters in the immediate vicinity of a potential theatre of operations. This allows the demonstration of political will without premature commitments resulting in international law implications. In addition, this flexibility equally enhances political and military freedom of action.

Naval forces can be employed flexibly and offer a wide scope of possible action. Those range from the support of diplomatic measures across intelligence and reconnaissance to the selective and precise weapons employment. In addition, naval forces can be employed as forward command platforms for joint operations and for the prepositioning of forces.

Despite geographic restrictions, the range of action of naval forces is not limited to the sea as a theatre of operations but extends to the littoral and parts of the airspace. Naval forces can provide a contribution to the air picture in the JOA and deliver precision firing deep into the theatre. Joint operational contingents can be supported in all capability categories.

It is essential to make joint use of these specific strongpoints in order to exploit the sea as a base

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<sup>12</sup> This term will hereinafter refer to ships, boats and other seagoing units of the Navy as well as ship-based (organic) naval aviation forces.

for future operations. This conceptual approach will hereinafter be referred to as *sea basing*.

### **3.2. Definition of Sea Basing**

#### **Sea basing is**

*the conceptual approach of the use of the sea to deploy own forces for joint operations across and from the sea in a timely, flexible and largely autonomous manner, to keep them ready, to command and control, to protect and support them.*

### **3.3. Sea Basing within the Capability Profile of the Bundeswehr**

#### **3.3.1. Command and Control Capability**

Traditionally, seaborne command platforms<sup>13</sup> ensure the command and control (C<sup>2</sup>) capability of the maritime component in a joint operation. Additionally, naval forces may also contribute to an improvement of the joint C<sup>2</sup> capability. A prerequisite for this is the technical interoperability between the military services in a common information and communication network, common C<sup>2</sup> procedures and an adapted C<sup>2</sup> organization.

Even if reverting to command and control from divided headquarters<sup>14</sup>, the Joint Force Commander should also be able to lead joint operations from a seaborne platform. The Bundeswehr Information Technology System (Bw IT System) permits a prepositioned commander onboard a seagoing unit to participate in an information, C<sup>2</sup> and engagement network together with a comprehensive CROP<sup>15</sup> in a network-centric operations environment and to communicate continuously and securely with forces in the JOA (including forces ashore and other

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<sup>13</sup> The German Navy currently has the following command ships: Type 123/124 frigates and – to a limited extent – Type 702 combat support ships and Type 404 tenders.

<sup>14</sup> CD&E topic of the Bundeswehr which includes the *Command and Control from the Sea* project and – in the field of Command and Control from and of Divided C<sup>2</sup> Installations – the *Home Base* and *Reach Back/ Reach Forward* projects. In this context, *Reach Back* means to make use of knowledgeable personnel who are not available in the theatre but in the home country, whereas *Reach Forward* means to make use of knowledgeable personnel who are not available in the home country but in the theatre.

<sup>15</sup> CROP: Common Relevant Operational Picture.

C<sup>2</sup> elements) as well as all relevant agencies at home<sup>16</sup>. Thus, the capabilities for participating in the information, C<sup>2</sup>, and engagement network on the basis of technical networking do not necessarily have to be ensured by land-based elements. In this context, a particular challenge is the limited data transmission rate of sea-based C<sup>2</sup> installations whose transmission requirements are even significantly increased if C<sup>2</sup> is exercised from divided headquarters. Additionally, services (Internet, mobile radio networks), which are made available through civilian providers, can normally be used on a limited scale only. Furthermore, additional military C<sup>2</sup> assets for ensuring interoperability cannot always be provided in time.

Together with the Army, the Navy has therefore – as part of Concept Development and Experimentation (CD&E) – initiated the *Command and Control from the Sea* project with which information about the opportunities for temporary sea-based command and control of land operations are to be gained initially on the basis of introduced or ordered Bw IT System elements.

Equally, air operations can principally be conducted from the sea on a limited scale. Together with the Air Force, elements of an Air Operations Centre (AOC) were implemented on board a Type F123 frigate during experimental exercise COMMON UMBRELLA 2006 (CU 06). The lessons learned during this exercise suggest general feasibility. Other detailed conclusions regarding technical, organizational and personnel-related adjustments on board will be derived from the evaluation. It is especially important to evaluate the infrastructure requirements and the interfaces for the implementation of an *Air Command and Control System (ACCS)*<sup>17</sup> (sub-)functionality on board appropriate ships.

### **3.3.2. Intelligence and Reconnaissance**

Naval forces contribute to intelligence collection and reconnaissance from the sea and thus make an essential contribution to military intelligence. It is necessary to create the prerequisites for

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<sup>16</sup> e. g. access to data bases, telemedicine available there.

<sup>17</sup> ACCS is a comprehensive and uniform operational command and control system of the air forces at

establishing and operating a Military Intelligence/ Geoinformation cell on board navy vessels. This will ensure the planning, management and coordination of intelligence collection and reconnaissance as well as the evaluation, analysis and processing of the collected findings and information as part of the picture compilation. The military intelligence products based thereon must be transmitted to the agency tasked with the central situation picture analysis via the command and control information system (CCIS) of the military intelligence community and be made available in the composite intelligence collection and reconnaissance system<sup>18</sup> in time and at the appropriate level. It is necessary to create capabilities for the exchange of information and intelligence by using national and multinational interoperable information and communication systems. The military intelligence capacities available in the home country must be used effectively by means of Reach Back. The personnel and materiel available to the Military Intelligence/ Geoinformation Centre will depend on the respective mission and the local/ spatial conditions on board and require further examination.

The support provided by naval forces includes visual and optronic reconnaissance as well as the collection and evaluation of information in the electromagnetic and hydroacoustic spectrum. Sea-based intelligence collection and reconnaissance may also permit information gathering in maritime areas of operations when the employment of land-based or airborne assets is not acceptable or appropriate for legal or tactical reasons. Obviously, the quality of reconnaissance results may be impaired by sensor- or environment-related limitations. A particular strength is the opportunity to conduct reconnaissance from positions, which are difficult to detect. Submarines, for example, can – if land-based reconnaissance capabilities are limited – reconnoiter the theatre along the coast and support the employment of special and specialized forces.

### **3.3.3. Mobility**

The mobility of naval forces permits nearly unimpeded deployment off foreign coasts, continuous

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tactical and tactical-operational level.

presence over an extended period and rapid establishment of new points of main effort.

Floating platforms can pick up Special Forces and their sea movement assets<sup>19</sup> and deploy them in the immediate vicinity of their area of operations. They can also be employed as *Afloat Deployed Operating Bases* (Afloat DOB) for Special Forces and *Special Operating Forces* (SOF) *Air*<sup>20</sup>. Submarines can covertly deploy and pick up Special Forces<sup>21</sup> including their equipment even under water.

It is essential to make more extensive use of these advantages on a joint basis in the course of worldwide foresighted conflict prevention and crisis management. As part of a strategic and operational deployability, *commercial strategic sea transport* (CSST) ensures sea transport in a nearly non-threat environment and against the background of an adequate port infrastructure.

Moreover, the conceptually required *military deployability by sea* (MDS) permits operational deployment<sup>22</sup> of self-contained contingents<sup>23</sup> to the JOA even in situations where no or only a poorly developed port infrastructure is available and where civilian services cannot be used to the extent required. MDS is ensured by military platforms and transshipment assets. With MDS, forces can be kept on standby in the region prior to their employment while staying outside national boundaries. In addition, MDS permits sea-based rescue and evacuation operations as well as the employment of Special Forces.

If the number of forces to be transported exceeds the level of ambition defined for sea basing, MDS will complement CSST. In this case, CSST will ensure the transport of the bulk of the materiel whereas MDS can be used as a shuttle between the last port safe for CSST and the theatre. However, MDS does neither include the capability for amphibious assault landings nor

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<sup>18</sup> As defined in Joint Service Regulation ZDv 2/1, para. 307.

<sup>19</sup> e.g. zodiacs, motor-driven underwater sleds, etc.

<sup>20</sup> Specially equipped helicopters, including specially trained crews, for the direct support of Special Forces operations.

<sup>21</sup> At present Special Forces of the Navy only.

<sup>22</sup> As opposed to strategic transport. Cf. Bundeswehr Concept of 9 August 2004, pages 36 f.

<sup>23</sup> Personnel and materiel at the same time (including the required operational stockpiling); on a scale

the resources required for such landings.

#### **3.3.4. Operational Effectiveness**

The yet to be developed capability of naval forces to selectively engage the enemy from the sea through joint tactical fire support with standoff precision weapons and the provision of security for land operations from the sea allow for the preparation and sustained support of operations of land forces in the littoral. The underlying basic concept required will be developed and enhanced within the CD&E project *Joint Tactical Fire Support*.

#### **3.3.5. Support and Sustainability**

Auxiliary ships and fleet and combat support ships provide support to the joint and combined contingent at sea and thus ensure the support and sustainability of own sea-based forces by providing logistic and medical support over a limited period of time<sup>24</sup>. In addition, they are capable of supporting land-based forces with certain logistic sub-capabilities and medical supplies. Especially combat support ships with mobile naval surgical hospitals aboard can effectively assist contingents in operations with focus on medical support<sup>25</sup>. Embarked helicopters can – to a limited extent – provide rapid and flexible support<sup>26</sup> in the littoral to land-based forces or evacuate them.

Should it become necessary to establish a seaborne logistic base in the JOA under the responsibility of the basic logistics organization, the transport from sea to shore and vice versa must be taken into consideration for follow-on support. A considerably increased requirement for helicopter capacities should be taken into account in order to be able to rapidly carry out any urgent casualty evacuation or personnel and materiel transport if treatment facilities are not available ashore. In addition to the transport capacity required ashore, organic shallow-water

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commensurate with the aims and objectives described in Section 2.

<sup>24</sup> Initial estimate: up to 30 days.

<sup>25</sup> Up to Echelon 2 (initial surgical and clinical treatment).

transport assets featuring the appropriate capabilities for transshipment between ship and shore must be kept ready.

### **3.3.6. Survivability and Force Protection**

Naval forces are particularly suited for operational protective tasks on the high seas and in littoral.

Surface units optimized for AAW<sup>27</sup>, for example, can monitor airspace with a radius of several hundred kilometers over sea and land and make a contribution to controlling this airspace within their effective range. Thus, the freedom of operation of armed forces is ensured to a certain degree even if the situation does not permit the employment of ground-based or airborne air defence systems or if these systems still need to be deployed. Their joint employment is particularly important if the organic air defence systems are inadequate. Additional air forces will then be required to counter the threat and to ensure the necessary degree of control over the airspace.

### **3.4. Operational Value of Sea Basing**

Sea basing permits,

(1) in joint and combined operations of response forces (high intensity, network-centric):

- the graduated presence and flexible concentration of effort of friendly forces by prepositioning;
- the essential contribution to continuous seaward security of the JOA;
- a contribution to air surveillance in the littoral and air defence within the effective range if ground-based or airborne air defence systems do not exist or still have to be deployed;
- a contribution to C<sup>2</sup> of joint operational contingents if land-based C<sup>2</sup> installations are limited in the landward area of operations (C<sup>2</sup> footprint);
- the use of weapons from the sea against targets ashore, or the threat to use them
  - o in preparation for the employment of own forces;

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<sup>26</sup> e. g. by casualty evacuation as well as personnel and materiel transport.

<sup>27</sup> AAW: Anti-Air Warfare.

- o for selective and precise engagement close to the shore up to the maximum range of the effector<sup>28</sup>;
  - o for increasing the psychological pressure against a potential adversary;
  - the ensurance of seaward logistic transports into theatre;
  - the support of the logistic sustainability in the theatre;
  - a contribution to de-escalation and to the transition to stability operations, where MDS can support the continued provision of personnel and materiel;
- (2) in stability operations (low to medium intensity, extended duration):
- the essential contribution to the continuous seaward security of the theatre;
  - temporary C<sup>2</sup> of land-based forces during the initial and final stages, and continuous C<sup>2</sup> predominantly of the maritime component of a joint operation;
  - the ensurance of air surveillance in the littoral and air defence within the weapons range if ground-based or airborne air defence systems do not exist or have to be redeployed;
  - the flexible support of the capability for escalation, if the situation so requires;
  - the use of weapons from the sea against targets ashore, or the threat to use them;
  - the ensurance of logistic transports, mainly as part of follow-on support, into theatre across the sea;
  - the support of logistic sustainability in the theatre;
- (3) in rescue, evacuation and assistance operations:
- sea-based C<sup>2</sup> of the entire operation;
  - the sea-based transfer and provision of assistance and support, including medical support as a complete package, also in case of a lack of infrastructure;
  - the evacuation of personnel and materiel by ships and organic helicopters;
  - the use of weapons from the sea against targets ashore, primarily for protecting friendly forces;
  - the support of the logistic sustainability in the theatre;
- (4) at the beginning/ after completion of military operations:
- a contribution to the (re-) deployment of friendly forces, including materiel and equipment.

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<sup>28</sup> e. g. with RBS 15 missiles.

#### **4. Investigations and Follow-on Steps**

Based on the Initial Sea Basing Concept and as a first step, joint C<sup>2</sup> procedures and an appropriate information management for network-centric operations from sea-based C<sup>2</sup> installations need to be elaborated.

On this basis, the operational requirements to be met by the Bundeswehr IT System and its maritime components can be established and an appropriate systems view be developed. At the same time, it is to be determined through joint investigation and stocktaking which introduced platforms, sensors, weapons and C<sup>2</sup> information systems of the Bundeswehr are already operational within the framework of joint and combined operations, or which adaptation measures may be required. This is to be taken into account when developing sea-going platforms for sea basing.

Prior to the implementation of platforms, information and communications systems, sensors and weapons for achieving a network-centric operations capability, it will be necessary to investigate, whether and to what extent new technologies and weapons systems of the Bundeswehr, including unmanned systems, can or must be seawardly deployed and employed in a joint context. Conversely, this also applies to the introduction of seagoing units, for the development of which existing technologies and weapons systems of the Bundeswehr, including unmanned systems, are to be taken into consideration wherever possible. As a general rule, the platforms will, in the future, have to be developed as part of the integrated C<sup>2</sup>, reconnaissance, and engagement network. At the same time, the technical prerequisites for network-centric operations are to be met in order to accelerate the C<sup>2</sup> process also in a joint environment and to translate information superiority into C<sup>2</sup> superiority and a superior engagement capability. The continuous development of joint C<sup>2</sup> procedures for the implementation of the principle of network-centric operations is to be vigorously pursued. The specific technical requirements of the sea-based C<sup>2</sup> installation components within an interoperable information and communications network are to be taken into

account. The interoperability of the platforms, information and communications systems, sensors, weapons, their deployment and employment from vessels of the naval forces, also in combined operations, are prerequisites for an effective, joint utilization of sea basing. Therefore, joint and combined interoperability of information, communications, weapons and other systems will, in the future, be a determining criterion in accordance with the capability-based approach of Customer Product Management (CPM).

With regard to the network-centric operations capability and the improvements of the sea-based C<sup>2</sup> support that are required for this purpose, technical and procedural options – including container-based solutions – for the implementation of modular supplements of the C<sup>2</sup> capability are to be examined. In this context, the capability for a joint service management system of the sea-based components of the Bundeswehr IT System must be provided, where required<sup>29</sup>.

In addition, options should be examined for making ships available as an air C<sup>2</sup> element for the C<sup>2</sup> of air forces in a joint environment, for a limited period of time and on a limited scale, until a land-based *Deployable Combined Air Operations Centre*<sup>30</sup>/*Deployable Control and Reporting Centre*<sup>31</sup> (DCAOC/ DCRC) has established operational readiness.

Based on the lessons learned during the experimental exercise COMMON UMBRELLA 2006, technical and organizational measures are to be taken that permit joint integration of ships into the air defence organization of operations.

On the basis of the advanced equipment of the Class-F124 frigates, participation in a theatre ballistic missile defense as an important contribution to the new capability profile of the Armed Forces is to be examined further to be able to protect own forces, the civilian population, economic centers and conurbations ashore in the future. Therefore, within the framework of

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<sup>29</sup> Usually above the tactical level.

<sup>30</sup> Deployable, usually multinationally operated combat operations centre for C<sup>2</sup> of air operations at the tactical-operational level.

<sup>31</sup> Deployable air defence operations centre for military surveillance of the airspace and for tactical C<sup>2</sup> of air

Germany's participation in NATO's ALTBMD programme<sup>32</sup>, not only technical adaptation requirements but also training and procedural deficits need to be identified at an early stage.

The establishment of the joint *Centre of Excellence for Operations in Confined and Shallow Waters* (COE CSW), which is to be manned multinationally, will provide NATO with an instrument for the development of procedures for joint operations in the littoral, which can also make substantial contributions for the Bundeswehr. The COE should be designed along organizational and personnel lines in such a way that the required operational procedures are developed jointly and in cooperation with the nations involved.

It should also be ensured that, during the joint fire support CD&E project, the procedures for joint fire support from the sea against targets ashore be already harmonized jointly, taking into account evolving international standards prior to the technical implementation. This includes joint training of the required operators on board the seagoing units and in the land-based formations.

Apart from the capability of submarines of transporting special forces, options for further support for operations of Bundeswehr special forces will also have to be considered in the future in view of achieving a joint capability profile of the Bundeswehr.

The use of the sea as a basis for joint operations also includes the unimpeded logistic flow for the supply of own forces. By analogy with the conduct of operations from the sea, a sea-based, joint (eventually combined) logistic element under the logistic responsibility of the basic logistics organization will be required if the establishment of land-based logistic supply facilities is not possible for the time being<sup>33</sup>. This approach is to be developed further in line with the NATO Sea-Based Logistics initiative to which the Bundeswehr must be capable of providing substantial logistic and medical support to smaller-scale joint operations from the sea. In this context, it is to

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forces.

<sup>32</sup> ALTBMD: Active Layered Theatre Ballistic Missile Defence. The programme is primarily designed to protect friendly forces against threats posed by ballistic missiles during operations.

<sup>33</sup> There was a comparable situation at the time of the humanitarian assistance operation in the Sumatra

be taken into account that, in accordance with German national standards, medical support is not part of logistics. Detailed planning of the support of sea basing by the Joint Support Service and the Bundeswehr Joint Medical Service is to be examined in follow-on documents.

The capability for MDS remains a joint requirement. This capability gap is to be closed swiftly by analyzing the operational requirements and by initializing the implementation process through CPM. In this context, also feasibility studies for the provision of MDS are to be conducted within the scope of a multinational project. The primary suitability of sea basing conceptual approach for the support of smaller operations implies that MDS, in terms of scope, is to be designed for a national military evacuation operation or for significant support of a EU BG. The implementation of appropriate platforms to be operated by the German Navy is to be examined using the experiences of other nations. At the same time, resources suitable for embarkation are to be identified in joint coordination. They are a design-determining feature for the implementation of MDS.

In addition, joint operational doctrines and procedures for deployments via sea transport are to be developed also using the experiences of German officers in international headquarters.

## **5. Summary**

Sea basing facilitates the use of the maritime space as a base for joint operations for the Bundeswehr,

The specific gain lies in the following options:

- Increasing the political and military scope of action;
- Deploying own and allied forces at an early stage prior to the outbreak of hostilities, performing continuous reconnaissance and maintaining presence over extended periods of

time;

- Being capable of taking military action also in those cases where an extensive employment of ground forces is either not possible or only justifiable to a substantially reduced extent;
- Limiting the *footprint* ashore if required and depending on the situation;
- Being capable of extensively supporting, and providing tactical security to, operations ashore in the littoral with consistent, uninterrupted C<sup>2</sup> from a secured environment;
- Providing assistance as a complete package via and from the sea during subsidiary assistance operations, especially if adequate infrastructure is not available in the theatre of operations.

Sea basing opens up new options for joint operations close to foreign shores. It is an open concept for all resources of the Armed Forces that can be deployed at sea, and employed and supported from the sea. Sea basing is a new conceptual approach that permits operations – which are generally limited in scope and duration – without committing unnecessarily high proportions of friendly forces ashore and thus to expose them to threats. Sea basing thus contributes to the improvement of the operational effectiveness of the Bundeswehr in all capability categories.

## **6. Distribution<sup>34</sup>**

See German original

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<sup>34</sup> The Sea Basing Concept – Basic will also be published on the Bundeswehr Intranet.