

# Combat Troops of the Army and Their Weapon and Effector Systems

The combat troops of the Army will represent the core of the ground forces and the essential elements for the success in operations in future, too. Even though other tasks and components have gained in significance in today's missions within the meaning of help and assistance, reconstruction and nation building, the tasks for protecting and fighting still remain the most important ones in the Army. The infantry and the armored corps are the combat troops of the Army, which are needed to execute tasks in various different scenarios and to finish them successfully.

Stabilization operations as well as activities in the aforementioned reconstruction and nation building have become new forms of employment for the army and its combat troops for some time. Even if the infantry-like employment of light forces figures often prominently, the protection of such forces and the employment of armored troops play an important role here as well. Recent operations in Iraq and Afghanistan have shown that armored units can be required in peacekeeping missions, too. In addition, the mission spectrum of the Army still comprises without any changes the mobile, intensive battle against militarily organized and equipped troops in the traditional forms of threat. But here just as in the other globally possible types of operation there are new forms of threat possible including terror attacks.

The tasks of ground forces and their combat troops have thus become multifaceted and more diverse. The mission spectrum frequently occurs parallel and intertwined in a narrow area. Against the background of the urbanization in the world, operations in urban environment (Urb Ops) are considerably gaining in importance. This does not only apply to the infantry, but also to mechanized forces. The above stated forms of threat are oftentimes mixed and multiply the dangers to the troops employed and the personnel of civilian organizations and the population. The characteristic term "Three Block War" describes this complex interlacing of operations, troops/forces, specific occurrences and effects on those concerned more clearly. The special challenge for the military command and its troops is apparent.

The success in operations and the improvement of the operability of the armed forces are the primary goals of the transformation of the Bundeswehr. A multiple spectrum of capabilities is imperative to ensure the success in missions. All these capabilities are important and often interdependent. Effect in operations and protection are capabilities, which are of high significance for the Army and its combat troops. Both aspects are in direct correlation, often also in a relationship of tension to each other. The

combination of protection and effect ensures the successful robustness of the employed combat troops. Modern armed forces must be capable of conducting the multifarious missions within the scope of network enabled operations (NEO). The aim is to achieve superiority in operations through the interactive combine of "command and control – reconnaissance – effect" on the basis of a modern communication structure. Ultimately it is intended to establish effect superiority.

Other troops have gained significance with regard to conducting worldwide missions of the Bundeswehr, which is reflected in the current structures of the Bundeswehr and its military organizational areas. The strength of the combat troops was reduced accordingly and the ratio to so-called "support forces" became unbalanced. In the present peacekeeping missions this is, for lack of assets, a reason to resort to branches like artillery or army air defence for operational battalions with protection and security tasks in secondary roles. The experiences gained in missions indicate a reversal of the trend, however. The above-mentioned employment of armored forces in such missions is one issue; the requirement set for additional infantry forces in the Army another one. In the following the combat troops of the Army with their tasks, capabilities and forces are briefly described. Explicated in this context are the most important weapon and operational systems of these branches of service, especially those that

are finally about to be introduced after long phases of development.

## Infantry

The infantry is being advanced to a highly mobile system, which conducts the dismounted infantry fight in special terrain and weather conditions in combine with the combat troops. Its capabilities for special operations and airborne missions have been extended. The infantry has to robustly accomplish its mission in all forms of employment. In highly intensive combat it must be able to contribute with high tactical and operational mobility over long distances to the combined arms warfare. With the airmobile units of the infantry using the "third dimension" it is possible to employ forces rapidly and over long distance, oftentimes to create the preconditions for the employment of follow-on forces.

The infantry is particularly suited for missions in crisis regions with a population that often lives in urban overdevelopments or difficult terrain. This is where the mostly asymmetrical fighting adversary hides and is active by using guerilla tactics. They seek an infantry-like fight at close distance in order to evade own superior effectors. Primarily suited against that is a modern infantry as it can perform its tasks at eye level in its very own métier. In addition it has the capacity to act with its means both pow-



Patrol Mission of German ISAF Forces in Afghanistan.

Photo: FMoD

erful and with a graduated reaction by avoiding collateral damages as far as possible at the same time.

When looking at the present missions of the Bundeswehr a major part of the combat troops of the German Army ought to consist of infantry units. The mechanized infantry would have to be included here, too, which master the dismounted combat, i.e. infantry combat, with the soldiers of the “rear battle compartment” of the MARDER armored infantry fighting vehicle (AIFV) that will soon be replaced by the PUMA AIFV. In the past years, the infantry forces in the Army were indeed less “plucked” than other branches of service. It might also be possible that a strengthening of the operational forces and primarily of the infantry component will be effected in the upcoming capability and structure studies of the Bundeswehr.

The “infantry system” is characterized by the organization of the basic elements, the linking to the group vehicles, and the Army command control and information system and by maximally identical equipment and materiel. In the new structure there are eight infantry battalions as well as a newly activated airmobile light infantry regiment. All infantry units must be capable of carrying out operations in built-up areas. Moreover, the different elements of the infantry possess additional special capabilities. As for mountain infantry it is the suitability and capacity to conduct operations in mountainous areas and in particularly difficult terrain, e.g. in jungle or desert areas. The alpine platoons of the battalions are capable of performing special missions in high mountain regions. By having to give up three units the mountain infantry has one battalion less. The battalions are subordinate to 23<sup>rd</sup> Mountain Infantry Brigade and are part of the stabilization force. Two of the mountain infantry battalions are equipped with the high-mobility cross-country BV 206S armored transport vehicle (ATV); the third battalion will get the BOXER ATV.

The airborne infantry – with four battalions still organized into two airborne brigades – continues to be capable of conducting airborne operations with different delivery means and is thus able to commit particularly quickly employable infantry forces even over long distances. Two battalions belong to the response force, the other two to the stabilization force. The airborne infantry units represent the core of the specialized forces of the Army with the capacity to conduct special operations such as rescue and evacuation operations or the fight against irregular forces. Accordingly, the equipment of the airborne infantry is of light design. In contrast to the previous 2-ton trucks and mobile platforms the MUNGO command and control and group vehicle (specialized forces combat vehicle – SFCV) is a real improvement in quality. The new WIESEL 2 light armored self-propelled mortar serves as a carrier platform for different functions and other infantry units, too.

Combat in forest areas and urban operations are the special capabilities of the motorized in-



Infantry on Mission.

Photo: DSO

fantry. It has lost two battalions, but it received a light infantry battalion as well as the mentioned regiment with a higher infantry component. The 292<sup>nd</sup> Light Infantry Battalion as part of the German-French Brigade will also be geared to the new task „airborne operation”. This battalion is also equipped with the BOXER ATV. As of June this year, a first increase of the infantry will result from the new mixed 291<sup>st</sup> Light Infantry Battalion of the brigade with approximately 600 soldiers stationed at the French Illkrich-Graffenstaden garrison. Two light infantry companies and one reconnaissance company equipped with the BOXER ATV and the FENNEK scout vehicle make up the core of the unit. 1<sup>st</sup> Light Infantry Regiment is the most innovative element of the infantry. It belongs to 1<sup>st</sup> Airmobile Brigade, organically connected with air-mechanized forces – i.e. combat and transport helicopters. Airmobile infantry and army aviation forces, including combat and combat support, will be enabled to conducted airborne operations under unity of com-

mand. Aside from five infantry companies of which two are heavy companies, the regiment disposes of organic engineer, air defence, NBC defence and logistic force for the dismounted combat on the ground. In the response force the regiment will be equipped with the MUNGO SFCV for rapid air deployments. The units of the stabilization force will get the BOXER ATV.

All battalions of the combat troops have a headquarters and headquarters company (HHC) as well as a combat support company each. In the infantry battalions there are also three infantry as well as one heavy company each. In these heavy companies there are three to five platoons each for 120mm mortars, tube launched TOW antitank guided missile system, grenade machine guns, tactical fire support and reconnaissance with WIESEL 1 armored tracked vehicles (not airborne battalion). In the companies we find the four-unit structure again: three infantry platoons and one heavy infantry platoon with MILAN antitank missile and sniper teams. The infantry platoons are or-



BOXER Armored Transport Vehicle.

Photo: ARTEC



Infantryman of the Future – Extended System.

Photo: Rheinmetall

ganized in the same way; aside from the platoon headquarters, there are three infantry groups each. The platoon is thus able to robustly solve independent tasks. The infantry group is regarded as a closed system with ten soldiers and multifarious equipment for different tasks.

## Weapon and Operational Systems of the Infantry

The BOXER ATV (general contractor is the ARTEC GmbH consortium, consisting of the Dutch Stork N.V. Company, the Krauss-Maffei Wegmann (KMW) Company, and Rheinmetall Defence – RMD) is the most important procurement project and the first really armored command control, transport and combat vehicle of the infantry. The “mother ship” for the infantry with a weight of about 30 tons and a protected volume of approximately 17.5 cubic

meters is a working area, stowage space for diverse equipment, rest area and liaison point at the same time. Co-action with forces in all forms of employment up to the combined arms combat is made possible. Air transport of the fully equipped BOXER with the A400M transport aircraft will also be possible. In addition to an excellent mobility made possible by an adapted undercarriage with a performance ratio of 21 kw/ton as well as a payload of approximately 8 tons, the vehicle possesses a high, modular-built protection and offers sustainability for the crew of up to eleven personnel as well. The modular design with multi-plate hull structure, modern light gage sheet metal technology, the shape of the hull, and protective measures at the undercarriage, heavily reduced signatures as well as balanced NBC defence systems generate a high protection factor against all known mines with high blast effects, airborne effectors, artillery fragments, and di-

rect fire from all sides up to 30mm ammunition. 40 BOXER ATV will be equipped with the remote-controllable light weapon station FLW 200 with 40mm grenade machine gun; the other ones will get the FLW 100 for 12.7 machine gun. The group/team vehicles of the infantry will become the interface for integrating the “Infantryman of the Future” (IoF) system into the Army’s command, control and information system (CCIS). The BOXER command vehicles will be enabled for integration into the Army CCIS by means of respective command, control and communication equipment, which creates an important basis for network enabled warfare (NEW). Planned for the Bundeswehr in the 1<sup>st</sup> batch are 272 BOXER in the group transport, command control, driving school, and heavily protected ambulance designs. The initial requirement of the Army consists in the 1<sup>st</sup> batch of 190 BOXER ATVs of which 125 are group/team and 65 command and control vehicles. The first group vehicles are in the process of delivery for the required tests since 2009. About 40 of them as well as the first command and control vehicles are to be fielded with the troops thereafter and the rest is expected to be introduced by the year 2013.

With the equipment “Infantryman of the Future – Extended System” (IoF-ES) the infantry will become an effector system in dismounted combat and in combination with the BOXER ATV. The same applies to the mechanized infantry groups with the PUMA AIFV. General contractor for the project planning is the RM-Defence Electronics (RDE) Company with participation of many component companies. In comparison with the basis system the “IoF-ES” is to improve the effectiveness and command capability, to reduce the weight of the system and to cut down the energy demand by use of new technologies. Numerous equipment components such as radio and data link of the individual soldier in the group, new weapon and optical and optoelectronic systems and vision devices, sensor and reconnaissance means improve the effect of both the individual soldier and the group. Several protection measures such as modular ballistic protection, breathable clothing with integral NBC basic protection or protection against optical reconnaissance are integrated. As long as the broadband radio equipment has yet to be fielded, the linking of the group to higher elements and to the Army CCIS is, for the time being, ensured by an alternate solution. The procurement of about 1,100 systems with an initial allowance of approximately 440 “IoF-ES” is planned as of 2011. In the Army, half of all planned groups could receive this modern equipment by 2014.

Several other vehicles of the infantry have already been indicated and are proving well in the missions. This is also true for the command and group vehicle of mainly the airborne troops, the MUNGO SFCV (manufacturer KMW, base vehicle by Multicar Company). It is suitable for cross-country driving and can carry about two tons. It can transport up to ten soldiers, propor-



WIESEL 2 Light Armored Self-Propelled 120mm Mortar.

Photo: Rheinmetall

tionally protected against infantry weapons, fragments, antipersonnel mines, and hand grenades. With their weapons they can engage targets right from the vehicle. A fully equipped airborne group including the vehicle is possible to be transported in a CH-53 helicopter. The 1<sup>st</sup> batch of the MUNGO totaling about 380 vehicles of the overall requirement of the Army of more than 1,000 units has been in the process of delivery since 2005. To be briefly mentioned here, as an example for an operational system is the DINGO 1/2, a large-capacity all-round protected transport vehicle, which is not only available to the infantry. In the current missions combat troops must frequently resort to other weapon systems, because just these are at disposal there. The DINGO 1 ATV has been in service for quite some time and, with its protective shielding, has saved many lives already. The DINGO 2 of the KMW Company is needed in Class 3 of the so-called „protected command and multifunction vehicles”, primarily as conversion kit carrier and for the Army additionally as patrol and security vehicle. In the preceding years, a total of 199 DINGO 2 has already been procured in advance for ongoing missions and operations. The DINGO 2 will be delivered in the three versions “short wheelbase”, “long wheelbase”, and “pick-up”. It possesses the presently best protection of this class against modern small arms, artillery fragments, NBC weapons, and by its improved anti-mine shielding. First variants are being delivered since late 2008 and deployed to Afghanistan as quickly as possible.

The infantry units will be equipped with the new air-transportable mortar combat system of



PUMA Armored Infantry Fighting Vehicle.

Photo: KMW

the RM Landsysteme (RLS) Company. The weapon platform “WIESEL 2 light armored self-propelled 120mm mortar” is the central system aside from fire control and periphery vehicles. An increased range of up to 8,000 meters, a high-value fire control system, fire readiness after 90 seconds, improved hit accuracy, and effect in the target are the outstanding features of the system. The mortar ammunition consists of the three modern types “high explosive”, “IR smoke”, “IR flares with a new multifunction fuse”. The vehicles have GPS-based navigation systems as well as a linkage to the ADLER/DVA II command and weapon control system of the artillery. The

procurement of the new mortar combat systems with a total of 74 mortar carriers began in 2009. Initially delivered by 2011 will be eight weapon platforms, some periphery vehicles and some ammunition. Another 30 mortars and additional ammunition are planned to be provided as initial allowance by 2014.

## Armored Corps

Strong and powerful armored troops, robust and maximally equipped are required in the spectrum of today’s and future missions. These

## Protection. Setting the standards.

SCHOTT is a leading manufacturer of high end materials, components and systems made of specialty glass and related materials. For over 100 years, SCHOTT is a reliable partner to the worldwide defense and security industry. More than 17,000 employees in 41 countries contribute to the company’s success. Products are being used in the field today to keep soldiers safe and to improve their effectiveness.

**Protection:** New armor materials and systems offer superior ballistic performance at a lighter weight than current solutions. Products include NOVOLAY® ballistic glazing systems made of borosilicate glass and glass-ceramics for vehicular armor as well as opaque armor substrates for personal armor.



info@schott.com

include also increasingly the above-mentioned operations of mechanized forces in urban environment. Armored forces and mechanized infantry complement each other and act often-times in close cooperation.

In peace-enforcing missions these troops – in the new structure configured as response forces – must be capable of conducting the highly mobile combat comparably to former armored troops. In addition, the stabilization forces of the Army need to have an armored backbone as well. Mainly intended for peacekeeping operations they must be capable of successfully prevailing against a partly militarily organized adversary. They must therefore be able to introduce their capabilities in combine with the operations of the response forces. The equipping of the stabilization forces with armored vehicles with a high protective effect and necessary robustness is therefore imperative. As to the armored corps, it is planned to improve the tactical engagement capability and the employment in all climatic conditions as well in urban environment.

With the new PUMA AIFV fire power, protection, and mobility will be united in the mechanized infantry and by its capability to make quick changes from mounted to dismounted employment it will contribute decisively to the mission spectrum of the combat troops. The modular protective equipment of the PUMA AIFV will open up many and diverse mission options. As a result, the mechanized infantry will make an important contribution to the medium capability spectrum of the Army. As already mentioned the mechanized infantry, due to its changing combat techniques, including the „infantry” component, is particularly suited to be employed as operating battalions in the peacekeeping missions of the Bundeswehr aside from infantry battalions. In the structure of the “Army 2010” there are eight battalions (mechanized infantry). Two of these battalions are subordinate to 1<sup>st</sup> Armored Division and thus to the response force. The other mechanized infantry battalion belongs to the stabilization force, two each to three of the four so-called stabilization brigades (mechanized infantry brigade). Basically, these units are identically structured and equipped. In three maneuver companies each there are three mechanized infantry platoons assigned. The mechanized infantry has still MARDER AIFV at its disposal today; in future, each company will have 14 PUMA AIFVs, modern antitank means as well as several small arms. Unfortunately, the mechanized infantry battalions were not to get an own, organic armored mortar company in the new structure anymore. As a consequence, the capability to act with organic high trajectory weapons against an enemy in or behind covered positions has been lost.

With the PUMA AIFV as a modern, modular weapon system and the most important procurement project of the Army it will be possible to make escalation-capable and robust forces rapidly available in future. General contractor is the Projekt System & Management



LEOPARD 2 A6 Battle Tank.

Photo: KMW

Company, a joint venture of the KMW and RLS companies. High tactical mobility, superior effectiveness and robustness, threat-related protection, space for the mechanized infantry group/team with nine soldiers, and the capability to conduct network enabled operations (NEO) are important performance characteristics. The PUMA has the first unmanned cupola of an armored infantry fighting vehicle with a stabilized 30mm coaxial machine gun 30-2/ABM firing 200 rounds per minute. With shots, sub-caliber ammunition (APFSDS-T) or air burst ammunition (time fuse technology) it is possible to variably engage hard, soft and even air targets up to a distance of 3,000 m. The multifunctional self-defence system (MUSS) of the EADS/KMW/RM companies will be integrated into the PUMA as a so-called “soft-kill” protection system. It spots antitank means as well as guided artillery ammunition by means of an approach warning device and engages it either by electromagnetic deception measures (IR jammer) or by multispectral screening smoke from the smoke grenade launcher. Standoff-active “hardkill” protection systems like the AWISS of the Diehl Company or the AMAP-ADS of IBD Deisenroth Engineering are under development and could be retrofitted later. These systems destroy approaching projectiles after detection by means of fragmentation charges and blast effect prior to impact. The EUROSPIKE LR system of the EuroSpike consortium (merger of RDE, Diehl, and the Israeli Rafael Company) will be integrated in the PUMA AIFV as a “multirole-capable light guided missile system”. This sophisticated system engages tanks, helicopters, infrastructure and fortifications horizontally or by “top attack” in all visibility conditions up to a distance of 4,000 m. The mechanized infantry is to receive about 400 systems as of 2012; a portable variant – inter alia for the infantry – is also planned.

The worldwide deployability of the PUMA is aimed for with the new A400M transport aircraft. The deployment will be performed in the Configuration Stage A (air transportable) with

a weight of just under 32 tons; the adaptive protection modules will be delivered separately. In the Configuration Stage C (combat ready) the PUMA presently offers the worldwide best combined all-round protection against antitank weapons, medium-caliber weapons, improvised explosive devices, self-forging projectiles as well as blast mines of more than 10 kg and bomblet ammunition. Stage C with about 43 tons will be established within one day after landing in the area of operations.

As from 2010 to 2019 it is intended to procure 405 armored infantry fighting vehicles. The delivery of the first PUMA AIFVs is planned as of the end of 2010. The integrated compliance demonstration activities are then to be carried out by 2012. The first series-produced vehicles for the troops are to be delivered as from the year 2013. The equipping of the mechanized infantry – comparable to that of the infantry battalions – with the “IoF-ES” system, modern small arms, and airborne imaging reconnaissance means such as MIKADO and ALADIN drones will additionally strengthen the operational capability.

The armored corps is the nucleus of the army forces and, owing to the combination of the features mobility, firepower, protection and command capability, it is particularly robust. In the mission spectrum of the response force the armored troops engage targets in high-intensity combat and in tactical encounter situations by fire, thrust, high tempo, and survivability. In the stabilization force the tanks contribute to the effect and controlled escalation and de-escalation. The strength of the armored corps has been shrinking considerably since the end of the 1990s; in comparison with the penultimate Army structure there are just 15 percent of the battle tanks left today. In the New Army the armored corps will consist of six tank battalions. Three armored battalions belong to the response force in the two brigades of 1<sup>st</sup> Armored Division. The other three units belong to the stabilization force with one tank battalion each in every mechanized infantry brigade. Three combat companies are available here, too, with

three platoons each with four LEOPARD 2A5 or A6 each. Firing unit is the tank platoon with two battle tanks each acting closely together in operations. The tank crew consists of the tank commander, gunner, loader, and driver. Each tank battalion has 44 battle tanks. The classic organization of the last Army structures has thus been maintained in the armored corps.

A total of 350 LEOPARD 2 A5/6 of the KMW Company will remain in the New Army. The LEOPARD has been upgraded several times in the past years. As probably the best battle tank in the world and a highly efficient effector it possesses among other things a 120mm L44 smooth bore gun of the RM Company whose operational value was even more improved by an extended barrel with new upgraded ammunition. The battle tank with a monocoque hull and multilayer spaced armor according to the CHOBHAM principle was improved by, among other things, additional armor plating. In addition, 70 battle tanks were equipped with additional mine protection against antitank mines. More retrofit actions have been taken into consideration for all battle tanks in order to adapt them to the entire range of the mission spectrum, including the employment under asymmetric threats. These measure include e.g. system adaptations for firing new 120mm HE ammunition, temperature-conditioned with a range of 5,000 m, an improved energy supply and air condition or the integration into the IVIS (inter-vehicular information system) command and weapon control system of the combat troops. This step is to be taken with approximately 150 battle tanks of which the 70 (mine protected) LEOPARD A6 battle tanks will be upgraded first beginning as of 2011. The employment capability of LEOPARD 2 battle tanks in built-up areas is another project. As from 2014 it is intended to adapt 50 battle tanks for urban operations (UrbOps). The KMW Company has already developed a LEOPARD 2 PSO (Peace Support Operation) battle tank comprising a package of retrofits. The Army has taken individual equipment packages into account, e.g. a protected loader weapon station, non-lethal effectors, dozer blade, external intercom, white light searchlights. Detailed specifications of LEOPARD UrbOps battle tanks are contained in another article of this issue.

The combat troops of the Army are all in all in a good state. Internal structures, equipment planning and training are generally all right. Additional units, especially of the infantry, would be important. Of special significance for the combat troops is the completion of the initiated armament projects. As far as the BOXER ATV, PUMA AIFV, LEOPARD 2 battle tank, and IoF-ES are concerned, things look quite good. However, the delivery speeds of equipment and retrofits and the implementation of the planning for new periphery equipment are causing worries. Also, "small-scale" armament projects are on the shady side and in jeopardy of being postponed or cut. There is quite a risk that the respective system of the branches of service and thus the Army as system of the systems will suffer considerable losses.

The situation would be different if the political side would appropriate more funds for procurements or if a reallocation of available investment means would be made in favor of current missions and operations. But this could involve the problem that the Bundeswehr and the Army would be seen through the spectacles of today's missions only and that other types of combat and capabilities, e.g. heavy weapon systems like battle tanks, artillery or air defence weapons, would be neglected. In any case it is amazing to see on television the astonished faces of politicians of every hue complaining about lacking equipment and materiel of the troops in the light of the attacks by insurgents in northern Afghanistan and the regrettable losses with German soldiers. The Bundeswehr has been under-financed since the early 90s with the investment share having always been ignored, a fact which ought to be known to most of the politicians. Only substantial, additional budgets will allow providing the required available equipment for the troops on mission and in training. As this is not expected to happen to a sufficient extent, it will still take some more years for the Army to have at its disposal modernized and fully operational combat troops. ■

By *Dietmar Klos, Col (GE A ret.), Special Correspondent for EUROPÄISCHE SICHERHEIT for Army and Armament Topics.*

## Disregard may Seriously Lower your Perspectives



»European Security and Defence« is a specialist magazine, which keeps track of events and developments in the defence and security arena. Our professional writers and contributors investigate, report, analyse, comment and — if necessary — criticise.

The magazine's objective is to describe, explain and interpret German security policy — which extends far beyond conventional defence with military forces — in all complex and sophisticated correlations. »European Security and Defence« analyses the implications behind the stories and forecasts the consequences of current affairs from an appropriate distance. As an unbiased periodical »European Security and Defence« provides answers to current and upcoming questions about international affairs, business, technology and defence matters. Opinions are considered in analytical comments, which are based on neutral and in-depth investigations.

Each issue provides readers with analyses, expert assessments and comprehensive information on

- International security political issues and decisions from the point of view of the North Atlantic Alliance and the European Community;
- The political, defence, business and technology environment against the background of national security considerations.

### Readers of "European Security and Defence" stay abreast with what really matters at decisive levels!

I herewith apply for a subscription to "European Security and Defence" for at least one year (three issues) at the annual European subscription rate of € 26.70 incl. postage (subscription rates outside Europe on request).

I will balance my account by:

Cheque (please make cheques payable to "Maximilian Verlag")

Bank/Wire Transfer  
IBAN: DE25 4808 0020 0381 4683 00  
SWIFT/BIC: DRES DE FF 494

Name, First name  Street, Address/P.O.B.

Zip/City  Country

Please fax to: Maximilian Publishing Group — Hochkreuzallee 1 — 53175 Bonn, Germany — Fax: +49 228-30789-15

**Mittler**  
www.mittler-books.de