

“Our Task is to Equip the Servicewomen and Servicemen on Mission with the Materiel they Need to Accomplish their Mission”

Harald Stein

An Interview Conducted by EUROPEAN SECURITY (ES) with Harald Stein, President of the Federal Office of Defence Technology and Procurement (BWB).

ES: Caused by the mission of the Bundeswehr in Afghanistan the equipment is recurrently in the focus of the general public. What are presently the most important armament projects in the responsibility of your office?

Mr. Stein: It is not possible to make a blanket statement about the top ten armament projects. A so-called “ranking” with armament projects would require uniform and thus comparable assessment criteria. But they do not exist. Instead, the importance or significance of an armament project depends on the viewpoint of the observer. Decisive from the point of view of the Federal Office of Defence Technology and Procurement (BWB) is the operational relevance of an armament project and thus the necessity to close capability gaps as quickly as possible. Because: our task is to equip the servicewomen and servicemen on mission with the materiel they need to accomplish their mission. Examples for such projects are e.g. the remote-controllable light and heavy weapon stations, the broad spectrum of protected command and multifunction vehicles as well as the SAATEG interim solution or product improvements with the CH-53 transport helicopter. Not to be forgotten here should be the service projects in the area of responsibility of the Federal Office of Defence Technology and Procurement (BWB) which contribute significantly to the logistic supportability e.g. with fuel/POL in missions.

The politico-industrial aspect is certainly also of importance in armament projects, especially with large-scale projects which can be regarded as an investment in the German economy to safeguard jobs and know-how. Typical are here projects like the PUMA armored infantry fighting vehicle, the NH90 light transport helicopter, the TIGER combat/support helicopter, the EUROFIGHTER or also the corvettes and frigates. From whatever point of view a project is seen, the task for the BWB remains always the same: to



Harald Stein, President of the Federal Office of Defence Technology and Procurement. Photo: BWB

procure safe and reliable materiel within adequate periods of time by taking account of economic conditions.

ES: Some of the current projects like the A400M, NH90, PUMA, 130 Class Corvette, etc. suffer from considerable delays, partly due to serious technical problems. Which possibilities do the official side or government have to prevent such a development?

Mr. Stein: Delays in the realization of armament projects can basically never be ruled out. This is inherent to the peculiarity of military equipment and the fact that it is often not commercially available. Especially the high complexity of sophisticated systems and the use of innovative technology result in the fact that the contractually agreed performance, time and cost frames need to be adapted to the progress of the project.

Nevertheless, our experiences have already shown that technical, time and fund-related risks in the subsequent course of the project are possible to be minimized early on, if not requirements of the military user which are not realizable or risky are identified within the scope of a technical assessment by the BWB in the analysis phase already – that is prior to the project start – and changed, reduced or even deleted in close cooperation with the armed forces.

To reduce delays in the progress of the project, a continuous risk management takes place at the BWB throughout the course of the project. Here, system fields are identified and assessed at especially the beginning of the project-planning phase whose realization continues to be subject to an increased risk. This occurs in cooperation with the industry and, if necessary, also with external independent agencies on the basis of diverse procedures. These range from an early application of structured and modern simulation procedures up to tests with prototypes at an early project stage. This proceeding allows to identify development deficits in time and to quickly find a solution for them.

In addition, comprehensive arrangements are made which take effect in the event of default of the contractor and which provide for e.g. retention of payments, compensatory financing (indemnification) or a possible cancellation of the contract. This puts the BWB in a position to induce, if so required, the company to make adjustments to the program acceptable to both sides, also to avoid additional delays in the progress of the project.

Aside from that there are also project-delaying factors, however, which cannot at all or just partly be influenced by the BWB. To be mentioned here are e.g. budgetary constraints, which can, should the occasion arise, result in a reversal of projects. And in the testing of delivered products there might also be a necessity for time-intensive subsequent improvements.

ES: The equipment of the Bundeswehr has to prove useful in missions more than ever before. What information and knowledge were you able to gather so far about the quality of the defence materiel in missions? How do you ensure that the materiel will meet the high requirements in future as well, especially when employed in missions?

Mr. Stein: Here I would first like to look back at the past. In former times the agencies of the BWB were often reproached for testing the equipment to be tried with intensive and partly also lengthy examinations methods by always exceeding the load limits up to a failure. The proving of vehicles like the DINGO all-round protected transport vehicle or the FUCHS armored wheeled transport vehicle in everyday use in Afghanistan has shown that this is the right way. We are about to further improve our test procedures and to concurrently reduce them in respect to time wherever possible to ensure that requirement-related Bundeswehr

equipment can get to the troops on mission as quickly as possible.

In order to adjust our testing methods to the mission reality even more precisely than hitherto, we have dispatched personnel to Afghanistan to explore the soil property and terrain conditions right on site. The knowledge gained from that will again be directly injected into the improvement of our testing facilities and procedures at home. An intensive weak-point testing program will supplement vehicle examinations in order to reduce in the final result the test periods without impairment of the quality. Another measure is a continuous mutual accompanying and advising between the office side and the troops both during the project planning phase and the subsequent in-service phase of Bundeswehr equipment to ensure that equipment in missions will meet the high requirements in future, too.

I would like to make this more concrete by some examples. Authorized representatives of the military user will be involved in the project work right from the beginning of the project planning. In addition, a comprehensive field trial of the system to be later introduced is conducted by the future user – in individual cases already in the project-planning phase – under the overall control of the project manager at BWB. With this proceeding the troops are given the chance at an early point in time already to gain experiences in the handling of the respective system fed into the subsequent series production.

Furthermore, the responsible project teams at BWB participate regularly in conferences with the military users in respect to Bundeswehr equipment or weapon systems that are in use. The BWB as the procurement activity collects information on deficiencies identified here, on obsolescence as well as on requirements for improvements, modifications, and further development and works out respective remedial measures. With the mission in Afghanistan the regular exchange of experiences gathered in operations, especially with regard to the technical proving of the equipment employed, gains more and more in importance. These experiences are taken account of in the development and procurement and the maintenance of equipment for the mission. A central point of contact and coordination for operational matters has recently been established at BWB; it has a branch at Kunduz and Mazar-i-Sharif in Afghanistan.

ES: How many personnel are employed in the BWB area of responsibility at how many locations and how high is currently the “annual turnover” of the BWB?

Mr. Stein: Presently there is about 10,200 staff employed with the BWB and the different agencies of its area of responsibility. Approximately 3,900 employees and civil servants work directly at the BWB head office; to be added to them are about 6,300 personnel of the subordinate seven Bundeswehr technical centers, the Bundeswehr research institutes, the naval arsenal, and the German liaison office of the armaments sector USA/Canada at Reston, Virginia, U.S.A. Another approximately 400 personnel are employed with the Bun-



DINGO all-round protected transport vehicle and the FUCHS armored wheeled transport vehicle in everyday use in Afghanistan. Photo: FMoD

deswehr quality assurance offices existing at 24 locations in the Federal Republic and at the foreign duty station in London.

The domestic agencies are located at Eckernförde, Kiel, Wilhelmshaven, Munster, Meppen, Koblenz, Trier, Greding, Manching, Erding, and Oberjettenberg each of which generally employing several hundred people. With 2,200 staff the naval arsenal with its arsenal establishments in Wilhelmshaven and Kiel is the largest activity, whereas the Bundeswehr Technical Center for Protection and Special Technologies at Oberjettenberg with its approximately 135 personnel is the smallest one.

In the past fiscal year, the BWB – not counting the agencies of its area of responsibility – has contractually turned over budgetary means to the amount of 6.13 billion euros.

ES: Will the structure in the present form last for some time or are there any changes pending? If yes, what kind of changes?

Mr. Stein: The 2010 target structure (level of ambition) put into force by the Federal Ministry of Defence (FMoD) for the BWB and its subordinate agencies is based on organizational plannings which project the tasks to be discharged in accordance with the approved principles for organization and personnel assessment. From today’s point of view this 2010 target structure will have been adopted as scheduled at the end of the year. Changes that exceed the 2010 target structure are not known of. It remains to be seen what results will be

achieved by the Commission for the Bundeswehr Structure agreed upon within the framework of the coalition agreement of the present government.

ES: What advantages do you see in the merging of the Bundeswehr Technical Center for Ships and Naval Weapons (WTD 71) with the Bundeswehr Institute for Underwater Sound and Geophysical Research (FWG)? Are there any first-hand experiences?

Mr. Stein: The Bundeswehr Institute for Underwater Sound and Geophysical Research was integrated into the Bundeswehr Technical Center for Ships and Naval Weapons on 1 February 2009. In that process the two operational areas of responsibility of the FWG were transferred into the WTD 71 as Areas of Responsibility 600 and 700. They form now the „Research Laboratory for Underwater Sound and Geophysics” within the WTD 71 that is designated “Bundeswehr Technical Center for Ships, Naval Weapons, Maritime Technology, and Research”.



Employment of a Bundeswehr CH-53 Helicopter in Afghanistan.

Photo: FMoD

taken account of and have already been included in the procurement price of the third combat support ship. Furthermore, the experiences gathered in missions with the 1st batch have shown that there exists an increased demand for utilization and exchange of items and parts. The establishment of the initial supply capability was also taken into account. All this and the extreme price increase with raw material such as steel and copper led to a boost in prices which would not have been possible to be avoided by an international allocation by tender either. The national realization of the third combat support ship made it additionally possible to maintain the national base as well as the know-how and important capacities in the German shipyard and supply industry and to safeguard approximately 600 jobs.

ES: What were the considerations that led to the establishment of the “Strategic Bundeswehr Purchasing Division” with the BWB?

Mr. Stein: Decisive for the establishment of the Strategic Bundeswehr Purchasing Division was the change in the mission of the Bundeswehr: away from armed forces for national defence and up to global conflict and crisis prevention. As a consequence, logistics have changed as well: away from depot logistics with large inventory stocks and up to successive and direct deliveries. Within the scope of supply chains to be regarded holistically, the procurement had to reorient itself, too, in order to meet these new parametric conditions.

First studies on that subject concerned the procurement of merchantable goods. Within the scope of the project for optimizing the procurement of commercial items the BWB has therefore prepared a concept for direct deliveries and has realized a total of approximately 10,500 items up to now. In the meantime it turned out that not only commercial goods require a new procurement concept, but that a comprehensive reorientation of the whole procurement system of the Bundeswehr is imperative. This particularly applies also against the background of the government program for an optimization of the public procurement on federal level. As a result, these developments entailed in 2006 the institutional establishment of the Strategic Purchasing in the newly created Service Division “E” (Purchase Division) at BWB.

ES: What are the tasks and performance targets for this division and how is the cooperation arranged with the procurement agencies of other ministries?

Mr. Stein: The task spectrum of the Service Division “E” at BWB comprises the economic supply of the Bundeswehr with spare and repair parts for weapon systems up to commercial goods as well as services within the scope

Synergy effects are expected by particularly the concentration of maritime research in just one agency. The deputy chief of the agency has now the function and task of the “Director of Maritime Research”. All research tasks in the maritime field that are related to the Bundeswehr are now coordinated internally in the agency, transformed into a joint R&T proposal, and submitted to the FMoD within the scope of the approval process of the research program. The internal coordination of the research work helps in giving scientific advice to the Navy and leads to a more effective transformation of the research results into new technologies and thus opens up for the Navy a faster access to new task-related defence materiel for the sailors on mission.

The utilization of the joint resources of the technical-operational service field, e.g. workshops, information technology, ships and boats of the WTD 71 as well as of the resources of the economic-administrative service field like administration, contracts and material management has resulted in economies in respect to material and personnel. Now, after about one year, the merging of the WTD 71 Technical Center with the FWG Research Institute can be rated a success.

ES: How do you assess the increasing “monopolization” of military-technical capacities in Germany? Would, for example, an international competitive tendering of the third combat support ship have possibly incurred fewer costs for the German taxpayer?

Mr. Stein: Military-technical capacities are possible to be maintained only if an efficient and future-oriented arms industry base continues to exist in Germany. Thus, the „White Paper on German Security and the Future of the

Bundeswehr” describes the indissoluble link between the defence industry base and a security and defence policy embedded in European, transatlantic, and other international structures. An efficient and competitive armaments industry with respective core capabilities and industrial capacities is an indispensable pillar for the sustainable mission capability and alliance competence of German armed forces. Consortiums and joint ventures of German enterprises must be able to meet the provisions of the cartel law. They are useful if they lead to a successful procurement.

And this is exactly where the procurement of the third combat support ship has to be placed. The Federal Cartel Office shares the assessment of the BWB that due to the capacity bottlenecks of the shipyards that existed at that time it could not be assumed that there was an anticompetitive accord. None of the companies involved in the bidder or tenderer parties would have been in the position to fill the order or to perform the service all alone. The third combat support ship is to be ranked as an auxiliary ship of the German Navy and was thus possible to be contracted to domestic contractors in accordance with the legal awarding provisions – formerly Article 296 EC Agreement. In addition, the third combat support ship was modified to a considerable extent on the basis of the experience gained in the employment of the first two combat support ships. This concerned the propulsion and energy-generating concept, the dimensioning of the ship’s hull, the accommodation concept, the rescue means, the self-protection system, and the control capability as well as the ship’s auxiliary machinery. The product modifications, which became necessary during the use and employment of the first two ships were



Research Ship "Planet" of the Bundeswehr Institute for Underwater Sound and Geophysical Research (FWG).

Photo: WTD 71

of public-private partnerships. The respective procedures are differently configured. The operational spare part supply is maximally standardized and furnished with provisions and rules within the scope of the so-called materiel requirements request procedure. The strategic procurement of commercial items with direct delivery is based on a directive particularly issued by the FMoD for that purpose. The detailed transferring into the complex rules and regulations world of the Bundeswehr is presently taking place. Respective rules of procedure are yet to be worked out for service projects within the scope of public-private partnerships.

Within the Bundeswehr the different procurement agencies work together in the so-called Bundeswehr procurement network. Here, the coordination lies in the responsibility of the Service Division "E" at BWB. And this division plays also a prominent role in the cooperation with the procurement activities of other ministries. By acting for the Bundeswehr it contributes within the framework of the government programs for the optimization of the public procurement to an increase and improvement of the procurement efficiency of the public authority. As part of the "department store" of the federal government, the contracts of the Bundeswehr are also made available to other federal ministries. Thus, requirements of the Bundeswehr, for instance, are – if possible – combined with the requirements of the Federal Police. The core task embodied in the Basic Law (German Constitution) of procuring for

and meeting the requirements of the armed forces continues to be the focus of attention, however.

ES: What opportunities does the BWB offer to job applicants, vocational entrants and trainees as an employer? Are you here in competition with the industry?

Mr. Stein: The BWB and its subordinate agencies offer a large number of opportunities for the vocational start-up both in technical occupational and administrative fields. At the BWB young people begin their vocational career as technical civil servants and employees or as administrators and employees without technical professional training. With a good certificate of completion of compulsory basic secondary schooling or secondary modern school (junior high school) there is a chance to start a vocational training at one of the agencies in the BWB's area of responsibility. The offers in training possibilities are in the commercial-technical field and range from aircraft equipment mechanics via chemical laboratory assistants up to system computer scientists. The training workshops and facilities in the subordinate area of responsibility of the BWB have a high standard and enjoy a good reputation which is confirmed by the exam results of those who completed their training.

Following a successfully completed training to skilled worker, master craftsman or technician there will be the opportunity to start out as a civil servant in the intermediate technical service. Since 2009 the BWB has been offer-

ing a study course with integrated career training for the higher technical service for high school and vocational college graduates. In the four engineering courses of study – information technology and electronics, mechanical engineering, information technology as well as aircraft engineering – there is currently a chance to earn a Bachelor degree and to thus embark on this career with good vocational perspectives. In 2011 this offer will be extended by the study course "marine engineering".

Embarking on the higher technical administrative service will be even faster with a completed engineering course of study at a technical college or an accredited Bachelor degree. With a completed engineering course of study at a university or college or a respectively accredited Master degree there is the opportunity to be employed as a civil servant in the higher technical administrative service.

In all mentioned fields the BWB is, of course, in competition with the industry for the best personnel. This competition is particularly distinctive in the field of trained engineers. From the viewpoint of the BWB, this competition will even stiffen in the coming years due to the demographic development. However, we are presently benefiting from the economic crisis. From the number of applications it is obvious that a secure job is momentarily of high significance. ■

Mr. President, we thank you for this interview.