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1. Foreword

The EUA Institutional Evaluation Programme was launched thirteen years ago with the aim of preparing universities to meet the emerging needs for external accountability by an increased capacity for both strategic thinking and internal quality culture. To date more than 150 universities from 36 countries have participated in this program and some have subsequently asked for follow-up visits to monitor progress made. The goal of the review is to offer to the university an external diagnostic by university leaders who have experience of different higher education systems in Europe. This diagnostic considers the quality issues and the main actors in the university's daily decision-making process. The EUA does not wish to provide the university with a blueprint for its development; rather the review process is consultative and should be seen as a tool to help institutional leaders as they prepare for change.

By reviewing institutions in different countries the EUA hopes to disseminate examples of good European but also international practice, to validate common concepts of strategic thinking, and to elaborate shared ideas on quality that will help member universities to reorient their strategic development while strengthening a quality culture in Europe. During the review the university is helped to examine how it defines its medium and long term aims, to look at the external and internal constraints shaping its development, to discuss strategies that will enhance its quality while taking account of these constraints.

The evaluation of the Military Academy is embedded in a system-wide extensive, independent, voluntary and objective review of Portuguese higher education institutions by the EUA, facilitated by the Ministry of Science, Technology and Higher Education (MCTES). About ten institutions are to be evaluated over the first year, taking into consideration the diversity of the Portuguese Higher Education system. The review will combine “first time” evaluations with “follow-up” evaluation processes (in cases where the “first time” evaluation was performed within the past four years).

The review takes place in the wider context of Government strategic objectives, including:

- To guarantee a system of higher education fully integrated at European level in terms of quality, levels of participation and employability of graduates
- To protect and improve the quality of teaching and learning, in a way that will foster participation in international networks of higher education and the full recognition of Portuguese higher education institutions and degrees
- To promote a diversified system of higher education in a way that will foster quality at the various types of institutions
- To acknowledge the increasing importance of research, development and innovation for the knowledge society
- To develop quality assurance procedures and processes in line with best international practice
- To increase the provision of lifelong education.
The Review Team for the Military Academy consisted of

Professor Jean Brihault, former Rector, University of Rennes 2, France (Chair)

Professor Winfried Mueller, former Rector, University of Klagenfurt, Austria.

Professor Don McQuillan, former Chief Executive, Irish Universities Quality Board (Secretary), Ireland
2. Introduction

The Review process consisted of several phases. The Academy first produced a Self-Evaluation Report (SER) prepared by the Self-Evaluation Committee. The Committee was chaired by Colonel Antonio Jose Pacheco Dias Coimbra and consisted of fifteen members that included representatives of the various bodies of the Academy, military and civil teaching staff, students and administrative staff. The Committee prepared the report over a six-month period with the active co-operation and involvement of all elements of the Academy. The report was clearly and succinctly written and was an excellent source of information for the team. It arrived in good time, allowing the team adequate time to analyse the information contained in the document and the several appendices.

The Preliminary Visit took place on 27-28 November 2006. This enabled the team to become acquainted with the Academy, with initial discussions centred in the areas of

· Autonomy
· Strategic Planning
· Research
· Teaching and Learning
· Quality Processes
· Organisation and Governance
· Internationalisation
· Resources
· Capacity for Change

as well as identification of areas for more detailed questioning during the Main Visit.

Subsequently the team requested and received further information and documentation in several areas, including: example of a course description (not engineering, not medicine); list of postgraduate study programmes, of joint study programmes, and fees charged; IT plans; examples of quality assessment questionnaires; description of relations with the Air Force and Naval Academies; process for dealing with students who leave the Academy; other documents the Academy considered helpful to the work of the team. The team is highly appreciative of the efficient work done in the preparation and translation of the requested documents. They were ready in good time for the main visit.

The Main Visit took place on 28 February-2 March 2007. During the two visits the review team met with the Commandant and the Deputy Commandant (promoted to Commandant before the main visit); the self-evaluation steering committee; the Directorate of Training and Education; the Infantry School Commandant; Commanders of the Air Defence Artillery Regiment and the National Republican Guard Regiment; undergraduate and postgraduate students; military and civil teaching staff; the military administration team; non-teaching staff; the Bologna working group; the Quality section; civilian stakeholders; representatives of the Ministries of Defence and Education; representatives of the local community. In addition the team spent time in both campuses of the Academy, the main campus located in Lisbon and the Amadora campus located in the outskirts of the city.
The meetings were always well organized, helpful, friendly and frank. It was clear that the process of self-evaluation had been extensive since everyone we met was familiar with the EUA evaluation process and its goals.

On the final day of the Main Visit the team presented the oral report indicating the principal conclusions and recommendations to an audience widely representative of the Academy. This written report is a full exposition of these conclusions and recommendations.

We would like to acknowledge warmly the exceptional co-operation and hospitality we received throughout the two visits. We thank Lieutenant-General Luis Nelson Ferreira dos Santos, Commandant during the preliminary visit, who signed the invitation letter to EUA, and Lieutenant-General Fernando Manuel Paiva Monteiro, Commandant during the main visit. They were available to the team at all times for discussion and consultation. We thank also the senior officers who so actively supported us during our two visits, and the staff and students, as well as stakeholders from outside the Academy, for their helpful contribution to our open discussions.

We wish especially to thank the chair of the Self-Evaluation Committee Colonel Antonio Jose Pacheco Dias Coimbra for efficiently organising the schedule and documentation for the visit, liaising with the review team and maintaining our daily schedule. We trust that our joint efforts will provide a sound springboard for the Academy as it moves into the next phase of its evolution.
3. Constraints and Institutional Norms

3.1. Profile of the Academy

The mission of the Military Academy (AM) states that ‘it is a higher education military establishment that pursues teaching, research and community support activities, with the core objective of educating officers for the permanent staff of the branches and services of the Army and National Republican Guard’. At the organisational level it reports to the Ministry of National Defence (MDN) via the Army General Staff. At the education level it is subordinate to both the MDN and the Ministry of Science, Technology and Higher Education (MCTES).

The Academy can trace its foundation back to 1641 and in the intervening years it has seen many changes in its name, organisation and functions. The present name dates back to 1959. In 1970 all teaching activities of Military Engineering courses were attributed to the AM, and the Academy progressively began to teach courses that had been previously provided by the Technical Higher Institute (IST). In 1976 the Academy began to confer Licenciatura degrees in Military Sciences.

The AM has two campuses. The main campus is in Lisbon, where the AM’s Command and support services are located, together with the facilities (accommodation, sports field, swimming pool) for students attending licenciatura courses of more than ten semesters duration. The postgraduate courses are also provided in these premises. The Detachment in Amadora is located in the outskirts of the city and it is here that almost all the curricular activities of the early years of the various licenciatura courses are provided, including the corresponding laboratory, library, sports and student accommodation facilities. The team toured both campuses and were highly impressed by the fine buildings and the facilities provided for staff and students. New buildings in Amadora, and others under construction, are state of the art and of a very high standard.

Currently the AM offers ten Licenciatura courses:

- Six in Military Sciences, covering various areas of expertise (four for the Army and two for the GNR). These courses extend over a total of ten semesters, nine of which are given in the AM and one, entitled Apprenticeship for Officers, is given in the Practical Schools (PS);
- Four in Military Engineering, covering various areas of expertise. These extend over a total of fourteen semesters, nine in the AM, four in the IST, and one in the PS.

A decision by the MDN on the introduction of a five-year integrated Masters degree along the Bologna model is expected soon.

In addition the Academy is authorized to confer military education diplomas as a complement to licenciatura courses taken in civil universities in the area of health (medicine, dental medicine, veterinary medicine, pharmaceutical studies). The complementary military education is provided by the AM. The Academy also offers Masters degrees in Information Warfare / Competitive Intelligence (GICI) and Military History.
There are five teaching departments in the AM: Natural and Exact Sciences, Military Sciences and Technologies, Engineering Sciences and Technologies, Human and Social Sciences, and Foreign Languages. These are within the Directorate of Training and Education (DTE) and are supported by a large number of laboratories. The third basic section of the AM is the Corps of Cadets, and this contains the Department of Instruction and Training.

A Research and Development Centre (CINAMIL) was created in 2001, and in 2005 this Centre was given responsibility for coordination of all R&D projects of the entire army. As a result CINAMIL is now a scientific research and technological development centre of the Portuguese Army, integrated within the hierarchical structure of the Command of the AM.

In academic year 2005/2006 the AM had a total of 676 undergraduate students, both male and female, of which 119 were in health, and had 32 postgraduate students, of which 12 were in GICI and 18 in Military History. The selection process for entering undergraduates is comprehensive and rigorous; applicants must have a background in science subjects such as Mathematics and Physics, and undergo medical, physical and psycho-technical tests. Cadets are members of the Army and GNR and receive a salary. That same year there were 59 civilian teachers, of which 15 had a PhD and 15 a Masters degree, and 65 military teachers, of which 1 had a PhD and 12 a Masters. The appointment of civilian teachers follows the same procedures as in civil universities; the appointment of military teachers is at the discretion of the Commandant.

According to the SER the MCTES determines the terms of reference in regard to the academic degrees, the conditions under which degrees may be given, structural and curricular requirements in general, and the modalities of teaching evaluation. The MDN organizes the education system of Army staff and defines the level of institutional instruction, training and education. The SER also notes that while the teaching staff is directly responsible for the construction of the academic curricula, the Commandant of the AM approves the content of the various curricular units, the Chief of the General Staff of the Army (CEME) approves the course plans and the MDN and MCTES approve the curricular structure.

The Military Academy is a highly professional military institution, well used to a culture of self-examination and self-knowledge. It has a long history, as well as wide experience of the training required to produce first-class officers for the Army and National Guard, which is indeed its core objective. On the other hand the SER asserts that the AM ‘aims to affirm itself as a first class Institution of University Higher Education at the national and international level’.

The Academy is aware of the difficulty inherent in finding a balance between the military and educational objectives. The SER notes that the functions and requirements associated with university status are broadly ‘heterogeneous’ in relation to the functions and requirements associated with a military unit, and admits that ‘it is not always easy to ensure compatibility between the rules that govern these two bodies’.
The rapid turnover of military staff is another way in which the Academy contrasts with other institutions of higher education. Most military staff spend three years in the AM, with the possibility of two extensions of one year each. This has consequences, potentially both good and bad, for the work of the Academy and we shall return to this topic several times in the body of the report.

3.2. Autonomy
The EUA supports strong university autonomy. The Graz Declaration states that ‘higher education remains first and foremost a public responsibility so as to maintain core academic and civic values, stimulate overall excellence and enable universities to play their role as essential partners in advancing social, economic and cultural development. Governments must therefore empower institutions and strengthen their essential autonomy by providing stable legal and funding environments. Universities accept accountability and will assume the responsibility of implementing reform in close cooperation with students and stakeholders, improving institutional quality and strategic management capacity.’

It is clear that the Military Academy does not have the kind of autonomy envisioned by the EUA, and given its mission it is never likely to have it. The usual criteria cannot apply here. The SER is clear on how the Academy functions: the AM’s courses are given in a military environment, aimed at transmitting behavioural education based on sound military, moral and civic education, marked by the fact that Cadets are simultaneously students and soldiers. The AM is answerable to both the MDN and the MCTES, and this can cause delays in implementing key developments. For example the Academy has obtained no opposition from the MCTES to introduce a 5-year integrated Masters degree within the Bologna framework but still awaits the all clear from the MDN. On the other hand the Academy does have a measure of limited autonomy in several key areas, such as:

- appointing teachers and other personnel
- enrolling students
- generating income from research and postgraduate courses

Financial autonomy is limited by the fact that 99.5% of the annual budget comes from the state and most of it is earmarked for the day-to-day running of the institution. This of course is not unusual, either in a national or international context. Nevertheless, this limitation seems to be compensated by the special status of the AM, and the ability of the Commandant to negotiate with peers, as witness the significant funding obtained for the recent striking development of the Amadora campus. It would appear that there are few bureaucratic buffers between the Academy and the top authorities.

3.3. Governance, Management
The SER is frank about governance and management in the Academy: ‘There is a clearly
hierarchical and centralised decision-making procedure in the AM. Although this mechanism is clearly defined and structured, it limits autonomy. It stands in clear contrast to the situation in other IUHE, where decisions are normally taken by a collective, which inevitably dilutes the degree of responsibility placed on each of its members’.

Rather than showing a limitation on the autonomy of the AM it seems to the team that this statement indicates rather an absence of the democratic processes found in most institutions of higher education; indeed, as we have already pointed out, the level of institutional autonomy enjoyed by the Academy is comparable to other universities in Portugal. What is different here is that students have no involvement in governance, and the civilian teachers appear to have little or no real involvement. This is of course in marked contrast to other Portuguese universities where students and teaching staff have, by statute, large representation on all boards and committees at all levels of governance.

The sense of the team is that in law, and in practice, the Commandant makes all important decisions, possibly after some consultation with his senior officers, and these decisions are then transmitted to the rest of the staff. Such a top-down system of decision-making can be effective in meeting both internal and external challenges in a rapidly changing economic, demographic and pedagogic environment. On the other hand a rapid turnover of Commandants over a short period can lead to a lack of continuity in the decisions taken, and this in turn has the potential to lead to some turmoil in the activities of the Academy.

In our discussions it was pointed out that all the officers serving in the AM know the functioning of the institution well, since they have all trained there, and over the years have spent periods of time on the staff. However, it seemed to the team that discontinuity in governance is an important matter that needs to be addressed; indeed in one of our meetings we were told that the Academy has had four different Commanders and five different Deputy Commanders in the last six years. We understand that career advancement and promotion are issues here, and that changing the way the Academy is organised is not in the power of the AM. Nevertheless, we suggest that the competent authority give consideration to the rotation system of officers in the Academy.

The question of more harmonious and fruitful relations between the military and civilian staff featured in many of our discussions. This also applies in the area of governance on matters relating to teaching and learning. In the interests of their collegiate involvement in the affairs of the Academy, and just as important, in the interests of making use of the academic expertise of the civilian teachers, the team recommends that the AM should seek ways to involve significantly these men and women in the decision-making process. This will become increasingly crucial as time goes by, and more and more highly qualified civilian academics join the staff.

Lack of autonomy in certain key areas together with a slow external bureaucracy hinders fruitful change and is the source of much frustration. This is not indeed unique to the AM but shared with other HEIs in Portugal, the extra burden here being that the Academy is subordinate to two Ministries. From the SER: ‘The dual external tutelage of the AM
increases the slowness and rigidity of administrative mechanisms, limits agility in terms of adaptation of structures and attribution of academic degrees’. And again: ‘As with other HEIs, the creation and closure of organs requires approval from above and publication of specific legislation that makes this process slow, bureaucratic and highly inflexible’. This state of affairs is of course out of the hands of the Academy, but the team recommends in strong terms that the relevant authorities act to facilitate change and flexibility.

3.4. Finance
The total budget of the Academy for the year 2005 amounted to Euro13,824,736. Of this 99.53% came from the government, with 98.39% earmarked for daily activities and 1.14% for Research and Development. This money comes from the Army’s General Command and management of it is subject to the Army’s administrative rules. Fees from postgraduate courses amounted to Euro 45,325, and other sources accounted for Euro 19,445. It seems that at the moment the AM has no way of attracting extra funding except through its postgraduate teaching and future research activity.

3.5. Quality Assurance
The Academy is well aware of the importance of achieving high quality in all its activities. The SER notes that in 1997 the AM applied for accreditation of its four Engineering courses from the Engineers’ Association, and in 2000 ‘the quality policy entered a broader stage with submission of engineering courses and other courses to the evaluation initiated at that time within the Portuguese university system as a whole’. As we understand this process the result of the review is a report that delivers a simple yes or no verdict on whether the programme achieves agreed minimal standards, and while it may include suggestions for improvement it is clearly a limited instrument if the goal is to achieve a culture of quality. The Academy knows this and established a Quality section whose current mission ‘encompasses permanent appraisal and subsequent increases in the Institution’s overall level of quality’.

Using an extensive series of questionnaires the Section has elicited information on a wide variety of the Academy’s activities and is in the process of establishing a database that is serving the Academy well. This work is ongoing but has already achieved improvements in several areas.

We would like to suggest that the AM now introduce a systematic and coherent process of internal quality assurance and improvement that includes the procedures noted above but in addition meets the guidelines set out in the Bologna Process. The quality of higher education has emerged as a key element in the establishment of the European Higher Education Area, and thus quality assurance is one of the main action items of the Bologna Process. In the Berlin and Bergen Communiqués the European Ministers of Higher Education committed themselves to supporting further development of quality assurance at institutional, national and European level, and stressed the need to develop mutually shared criteria and methodologies on quality assurance
They also stressed that the primary responsibility for quality assurance in higher education lies with each institution itself and this provides the basis for real accountability of the academic system within the national quality framework. They agreed that the national quality assurance systems should include evaluation of programmes or institutions that would involve internal assessment, external review, participation of students and the publication of results.

The EUA proposes a coherent QA policy for Europe, based on the belief that universities are responsible for developing internal quality cultures and that progress at European level involving all stakeholders is a necessary next step. With the active contribution of students, universities must monitor and evaluate all their activities, including study programmes, research productivity, innovativeness, competitiveness, management, funding systems and services.

The procedures must promote academic and organisational quality, respect institutional autonomy, develop internal quality cultures, be cost effective, minimise bureaucracy and cost, and avoid over regulation. External quality assurance procedures should focus on checking through institutional audit that internal monitoring has been effectively done.

For the EUA, as for the Ministers of Education, the key elements in a QA process are:

- self-assessment by the unit being evaluated
- review and site visit by peers including external peers
- publication of the peer review report
- effective follow-up on recommendations for improvement
- minimal bureaucracy
- quality improvement
- involvement of students and other stakeholders
- evaluation at regular intervals

We refer to:

Given that Portugal is a signatory to the Berlin and Bergen Communiques we recommend that the Academy establish an internal QA system based on the above principles. To ensure coherence and harmonisation across the AM, the guidelines and operational procedures for this important work should be agreed across the institution and the Quality section should organise and oversee the details of the procedures. It is crucial that the section should monitor carefully the results of the evaluations and that the results are fed into AM’s database. Much important information about how the institution functions will be obtained in this way with obvious benefits to the process of on-going strategic planning.

Other procedures affect the quality of performance in a university. These include the
appointment of new staff, the quality and number of the incoming students and the related issue of their formation and motivation. The staff to student ratio in the Academy is relatively low by standards elsewhere. With proper attention to staff development this has the potential to ease the required transition from a teaching to a learning culture in line with modern educational trends.

The SER refers to a problem with incoming students that is also evident in many parts of Europe, namely their poor preparation and lack of interest in mathematics, physics and other ‘hard’ sciences, as well as their inability to express themselves clearly in their own language. In many cases this poses a threat to the institution’s admission policy, and overall standards, by reducing academic requirements for incoming students. An immediate step that the AM can take is to provide tutoring and bridging courses to assist first year students.

The team met with many cadets and was impressed by their energy, enthusiasm for their training, and generally good command of the English language. They were obviously highly motivated for their military syllabus, less so for their academic work. While this may not be surprising given their choice of career, the team got the distinct impression that the academic and military courses are not sufficiently well integrated. We shall return to this in the section on Teaching and Learning.

The procedures for appointing civilian teachers conform to the national norms for universities and appear to be quite open, transparent and totally in the hands of the Academy. It is essential that this important element of autonomy is maintained and that procedures are scrupulously applied. An important issue here is the age distribution, with a high proportion reaching retirement age over the next ten years. The team agrees with the SER that this situation presents an opportunity to direct the future development of the Academy by the infusion of new blood. It is important that only highly qualified scholars are appointed with proven potential for both good teaching and quality research.

The choice of military teaching staff is at the discretion of the Commandant; the team understands that he can choose the officers he wants. The SER notes that the military teaching staff is primarily dedicated to teaching military disciplines, that their professional qualification level is high (almost all are senior officers, many qualified with the Course of the General Staff), and that a significant number of the officers have international experience in the Portuguese Army. The AM is happy that the potential discontinuities in course content and presentation caused by the quick turnover of military staff is more than compensated by the fresh approach and up-to-date knowledge of the officers coming in.

3.6. Strategic Planning
The EUA believes that strategic planning is a central and significant activity in a modern university. It has been described as ‘the continuous and collective exercise of foresight in the integrated process of taking informed decisions affecting the future’. Throughout the
SER there are references to the need for this kind of forward-looking approach. Some examples:

- A weakness is short-term management, without the possibility of coherent planning (page 14)
- Create a forward-looking, anticipatory capacity (page 19)
- It should be emphasized that there is a critical need to have an organ responsible for strategic advice and forecasting, including representatives of the external environment, in order, with due prior notice, to be able to foresee necessary changes that must be implemented (page 19).
- The AM must define its strategic positioning within this dual framework (i.e. MDN and MCTES), in order to safeguard its capacity to evolve and innovate (page 23)

Yet the AM has no strategic plan, and in our discussions with the Command we were informed that it is not possible to formalise a strategic plan because of the hierarchical structure in which the Academy operates. Another, related, factor may be, once again, the uncertainty inherent in an institution in which the Commandant may only be in the post for a short time before moving on to another post at short notice.

Absence of autonomy has led the Academy to give priority to strategic thinking rather than strategic planning, and this approach has had a good deal of success in certain areas. For example: A Quality policy has been elaborated and as we noted before a Quality section established that makes it possible to identify the institution’s best practices, its strengths and weaknesses, the areas of activities and the minimum acceptable standards; a Bologna group is examining the consequences for the AM of the Bologna Process and how best to implement it; the AM has worked diligently to gather important information about its activities and functions, and this information is being put to use. However even short-term planning based on this work is problematic, as witness the delay in gaining permission to introduce the 5-year integrated Masters degree referred to previously.

The team urges the Academy and the relevant authorities to introduce strategic planning as a matter of urgency. Strategic planning is a necessity in all complex organisations, and we have noted above the repeated statements in the SER stressing the need for it in the AM. The basic questions to be answered are well known: where are we now? where do we want to be? how do we get there? These questions apply to all activities of the institution.

4. Capacity for Institutional Change

4.1. Teaching and Learning, Student Care
Teaching and learning are an important element in the Academy’s thinking on future developments. Apart from the Bologna reforms, which we shall discuss in a separate section, the AM is aware of the need to change the pedagogic methods in use up to now. Students have heavy contact hours, up to 37 a week, even after a recent review and readjustment of timetables. The emphasis is on teaching. The SER states that ‘as in other
HEIs the learning process tends to be guided by non-critical memorisation of study materials, with studies made in function of tests, and individual and group work produced in a routine and not very creative manner. Some officers spoke of a culture of over protection of cadets, of spoon-feeding. A representative of a university that has student exchanges with the AM said that initially cadets find it difficult to adjust to working independently.

On the other hand a representative of IST informed the team that cadets are always among the best students when they go there to continue their studies.

There is a need to adopt a new mindset, now common in many universities, with a move from a teaching oriented system of instruction to an emphasis on student learning and student self-reliance. This is entirely consistent with the Bologna programme and the AM is already well aware of this. We recommend that the Academy proceed with the implementation of this important change of approach. The favourable student to teacher ratio should help to facilitate the process.

Formal lectures should be reduced and augmented by well organised and supervised self-study and group-study assignments, by tutorials, workshops and an increase in project work. Of importance is the continuation, and perhaps the re-appraisal of the focus, of the present formal system of student questionnaires for the assessment of courses and teachers, with timely feedback to students of actions taken. The process should be supportive and formative and lead to a continuing dialogue between teachers and students. It should never be used to apportion blame for perceived weaknesses. It is an important element in developing a climate where improvements can take place. This will also have a long-term positive effect on the process as a whole since students will become convinced that their views are being taken into account.

Staff development is central to the points considered here. We stress that it is of the utmost importance that training in teaching and modern presentation should be available to the teaching staff. This is particularly true of teachers who have been working in the non-university sector and come to teaching later in their careers. The new emphasis on learning will highlight the necessity to provide guidance to staff members in new methodologies, in modern methods of communication, and in mutually beneficial interaction with students. The present sabbatical system for staff should be available to more people. This, allied with an active exchange programme with foreign scholars, will bring fruitful interaction with institutions abroad and provide useful benchmarking on international practice.

These initiatives will require a structured approach, good organisation, and systematic funding. We recommend that the university establish a special unit with responsibility for staff development and training, as well as various support services in relation to new and experimental ways of teaching/learning.

The team congratulates the Academy on having introduced modularisation of its courses. This is a development that can have a profound effect in many areas and is indispensable in the effective implementation of many of the Bologna reforms. As the AM develops its
postgraduate offerings it will simplify the structuring and organisation of interdisciplinary studies for both the students and the institution, and may point the way to new combinations of subjects for interdisciplinary and multidisciplinary work. At undergraduate level it opens up the possibility of a more effective use of resources by identifying, or indeed creating, courses that could be regarded as basic or core for all or many students following different degree. This in turn has the potential to reduce teaching hours, thus freeing up time for research.

The team was concerned by the very small number of students in some of the modules, as small as one or two in some cases. We were assured that this is unavoidable since the Army has a need for graduates with very specific skills. Nevertheless, the team feels that a cost-benefit analysis of this situation would normally lead to a serious re-appraisal. Given the present economic climate and the need for funding in other areas of the Academy, we recommend that the AM consider ways around this practice.

In many meetings and discussions it was clear to the team that there is a disconnect between the scientific and military communities as to how each of these groups see the pedagogic priorities of the Academy. The SER notes the ‘difficulties in terms of coordination and ensuring compatibility between military instruction and teaching and civil university education’. The AM hopes that the programme set out in the Bologna Process will serve to achieve a more harmonious relationship between the two sides, and we urge the Academy to make every effort to bring this about.

The team was given a tour of, and was very impressed by the Academy’s provision of student support services. These include excellent accommodation and dining facilities, study and relaxation areas, computer rooms, sports facilities including athletic tracks, gymnasia, a covered swimming pool, health services, a chaplain. The list goes on.

4.2. Research

Part of the mission of the Academy is to affirm itself as a first-class Institution of University Higher Education. The EUA believes that such an institution should have a strong international research profile, not only for the obvious reasons that research adds to knowledge, invigorates the intellectual, cultural and economic climate, and stimulates funding, but just as importantly because it enriches the teaching capacity of the staff and of the institution as a whole. At the moment, however, research activity in the AM is quite restricted and, as far as the team could judge, it appears to involve only a small number of staff and is not well publicised. Furthermore there seems to be no coherent plan to develop research activity over the coming years, and funding is minimal. On a happier note the SER states that ‘the commanding authorities of the Army and GNR have manifested growing sensibility in relation to the importance of research, thus opening a window of opportunity for an increased financial and institutional effort in these areas’. We come back again to the pressing need for a medium to long-term strategic plan that will address in concrete terms where the Academy wants to go in research.

We have referred already to the R&D Centre CINAMIL, which the AM established in
2001 with 55 members and 12 research projects, and is now a scientific research and technological development centre of the Portuguese Army. This is very poorly funded, with an allocation in 2005 that amounted to only 1.14% of the Academy’s budget. It seems that appraisal of projects is based almost solely on predicted costs since there are no clearly defined research areas of military interest due to the lack of a structured, long-term defence policy. In addition to this, the projects undertaken by the Centre do not fall within a scientific area recognized by the Portuguese Foundation for Science and Research (FCT), and this, allied to a lack of critical mass, has made it impossible for CINAMIL to be accredited by the FCT. The team notes that the establishment of a single R&D Centre for the three Armed Forces Academies is being mooted, with CINAMIL as an important constituent.

Accreditation by the FCT is obviously an immediate goal of the research effort in CINAMIL. The SER identifies as a key objective the creation of a clear updated strategy in connection with problems of life in general and of the military institution in particular. This strategy should focus on Security and Defence issues, understood in a broad manner in order to include the new aspects of these issues, since these are fields in which the AM has a recognized set of skills. This strategy should aim to achieve recognition of these fields as a Specialised Scientific Area by the competent authorities of the MCTES and above all by the FCT. This is another good example of strategic thinking in the AM. However, this strategic thinking must be made concrete by the creation of a strategic plan, otherwise it will remain at the level of wishful, rather than strategic, thinking.

We recommend as a first step that the AM establish a unit, similar to the Bologna group, to realistically study potential research areas, including the important ones outlined above, and prepare a paper on the way forward, both short and long-term. This research study group should be representative of all levels of the Academy, include external partners, and include civilian teachers. We note that there are 15 PhDs among the latter and that of course research should also be expected from the civilian side. The group should instigate an institution-wide debate on the issues. Thus several iterations may be needed to reach a final document, and this ought to be generated fairly quickly to avoid the impression that it is an everlasting exercise. Resource implications will need to be faced by the AM and other appropriate authorities.

The effect on the Academy of this exercise, if successful, will be well worth the effort. It will invigorate the teaching activities as teachers bring their research enthusiasm to the classrooms. It will open the way to the creation of a detailed research strategic plan, with action plans that include time lines, required resources, actors, ways to overcome difficulties, and performance indicators. Remember that critical mass in research groups is crucial, so thought should be given to this when new teaching appointments are being made.

4.3. Bologna
The university sees implementation of the Bologna reforms as a vital support in improving the teaching and learning performance, and in bridging the perceived gap
between the scientific and military communities. Although introduction of the reforms only became mandatory in March 2006, the AM is ready for the required changes, having already established a Bologna working group to study the process and prepare the way. The SER notes that ‘the AM intends to alter its entire legal regime (Charter and Regulations) in accordance with the regulatory diplomas published by the Portuguese government’. The team congratulates the Academy on these developments. We realise that the problems in fully implementing Bologna are complex and exacerbated by the double bureaucracy that the Academy has to face.

All courses have been modularised and a system of credits introduced. This system does not conform to the ECTS, but the team was assured that the required adaptation will be carried out soon. When the Bologna supplement becomes available later this year the way will be open for student exchanges. It seems that the recognition and acceptance of credits earned at other Portuguese HEIs and abroad is an issue that has yet to be resolved, and we urge the AM to tackle this issue soon. It will not be easy, coming as it will on top of the difficult passage from a tightly controlled teaching environment to a learning one.

As we have already observed in the section on quality assurance we urge the Academy to introduce an internal process of quality assurance and quality improvement that conforms to the norms in the Bologna programme and to the system outlined by the EUA. Quality is a central ingredient of Bologna, and has been emphasised in the Portuguese government’s strategic objectives outlined in the foreword to this report.

4.4. Staff
The staff are obviously dedicated to doing their best for the cadets, and even the complaints we heard in our discussions with them were couched in terms of caring involvement and loyalty to the Academy. The students we met were generally happy with the teaching they received, though some thought the content out of date in the case of some of the teachers.

There are some areas of real concern. We have already referred to the poor research performance of the AM, and have made recommendations designed to initiate movement in the direction of planning and implementation of reforms. This should be a priority for the Academy. Hand in hand with this is the need to publicise the work staff members are doing, not only in research but in all areas of scholarship, perhaps by means of an annual report.

The articulation between civilian and military staff in all sections of the work of the AM is another concern. The role of civilian teachers in pedagogical decision-making must be enhanced and full use made of their expertise. The team noted, with some surprise, that the Bologna and Quality working groups contain no civilian teachers. In general terms the AM should consider ways to encourage and enhance fruitful cooperation between the two communities.

There is a need to reflect on the mission of the military staff and the articulation of the teaching with the command missions. The rapid turnover of the military teachers was
raised in many of our discussions and has been referred to several times in this report. In one of our meetings the case was made for establishing a board of military teachers whose primary function would to teach in the Academy. This topic might be worth further discussion in the AM.

The future recruitment and development of civilian staff are matters of crucial importance if the Academy is to fulfill its mission to be a first class University Institution of Higher Education. The teaching and research profile for each vacant post must be decided in terms of the research strategy of AM, and where appropriate, with critical mass in mind. Those appointed must have a PhD and a proven capacity for research. They must be encouraged to continue their research, and this means the Academy must create an environment in which research is visibly appreciated and rewarded. Seed money for new projects and sabbaticals will play a role in this. This does not imply of course that the teaching function is to be downgraded; we have already noted the importance of staff development, and have made a recommendation in this area.

The team was informed that it takes two years to fill a civilian staff vacancy, from the time of publicly advertising the post to making the appointment. This is the case for all universities in Portugal and is out of AM’s control. We urge the relevant authority to abolish this outdated system as soon as possible and to bring the appointment procedures in line with international best practice. First class universities cannot afford to stand in a two-year line to bring in new staff.

4.5   Internationalisation
The SER is frank on the Academy’s approach to internationalisation: Given the main objective of the AM, internationalisation of its students is, at best, an ancillary objective. Of course Portugal has been a member of NATO for 50 years and the Army has participated in peace-keeping missions around the world. Many officers in the Academy have served on these missions, and so experience of international cooperation and interaction is part of the Academy’s culture. The AM also provides support for military establishments in the Portuguese-language countries.

At cadet level there are agreements with Military Higher Education institutions in Brazil, France, Mozambique, Spain, USA, etc., that provide for short study visits and exchanges, with the possibility of participation in military exercises. At postgraduate level a protocol has been signed between the AM and the University of the German Armed Forces that involves an exchange of students and staff and the joint implementation of R&D projects. AM also has a joint Masters degree course in “Science de la Cognition” with the University of Bordeaux 2. Further exchanges of cadets and officers are in the pipeline in the context of EU security measures.

At university level there has been little formalised exchange activity apart from the occasional sabbatical leave. It is clear however that if the Academy is to fulfill its stated ambitions in developing Bologna then it will be necessary to draft a policy document on internationalisation, and a time frame for implementation of proposed actions. In this
context, in order to facilitate students from abroad, the AM could provide some of its academic courses in the English language. Given the excellent command of English we found on our visits to the Academy this should present no problem.
5. **Envoi**

We wish to thank the Military Academy once again for its generous hospitality and for the excellent arrangements provided for the Review Team. It was a pleasure to be in Lisbon to discuss with cadets and staff the future directions of their impressive institution. At this time of profound and far-reaching change in higher education the Academy is to be congratulated for its frank and open examination of its ability to meet the challenges and opportunities that lie ahead. In all our meetings we were struck by the strong determination to see the AM achieve its full potential as an institution of high international standing. We hope that the Academy finds our comments and suggestions helpful, and we wish it well for the next stage of its development.