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# Accreditation Report for the Postgraduate Study Programme of:

**Secure Telecommunications and Network Systems** 

Department: Informatics and Telecommunications
Institution: National and Kapodistrian University of Athens

Date: 15 September 2023







Report of the Panel appointed by the HAHE to undertake the review of the Postgraduate Study Programme of Secure Telecommunications and Network Systems of the National and Kapodistrian University of Athens for the purposes of granting accreditation

# **TABLE OF CONTENTS**

Part /	A: Background and Context of the Review4
I.	The External Evaluation & Accreditation Panel4
II.	Review Procedure and Documentation5
III.	Postgraduate Study Programme Profile6
Part I	B: Compliance with the Principles7
	CIPLE 1: QUALITY ASSURANCE POLICY AND QUALITY GOAL SETTING FOR THE POSTGRADUATE STUDY RAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT
PRIN	CIPLE 2: DESIGN AND APPROVAL OF POSTGRADUATE STUDY PROGRAMMES
PRIN	CIPLE 3: STUDENT-CENTRED LEARNING, TEACHING, AND ASSESSMENT
	CIPLE 4: STUDENT ADMISSION, PROGRESSION, RECOGNITION OF POSTGRADUATE STUDIES, AND
PRIN	CIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES
PRIN	CIPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT
PRIN	CIPLE 7: Information Management
PRIN	CIPLE 8: Public Information Concerning the Postgraduate Study Programmes 22
	CIPLE 9: On-going Monitoring and Periodic Internal Evaluation of Postgraduate Study
PRIN	CIPLE 10: REGULAR EXTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES
Part (	C: Conclusions
I.	Features of Good Practice
II.	Areas of Weakness
III.	Recommendations for Follow-up Actions
IV.	Summary & Overall Assessment

# PART A: BACKGROUND AND CONTEXT OF THE REVIEW

# I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the postgraduate study programme of **Secure Telecommunications and Network Systems** of the **National and Kapodistrian University of Athens** comprised the following four (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

# 1. Dr. Sotiris Skevoulis (Chair)

Pace University, New York City, USA

# 2. Mr. George Kolipetris

Postgraduate Student, Department of Electrical & Computer Engineering, Xanthi, Greece

# 3. Prof. Emeritus Panos Papamichalis

Southern Methodist University, Dallas, USA

# 4. Prof. Emeritus Nicolas Spyratos

Université Paris-Saclay, Paris, France

# II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (EEAP) was formed in late August 2023 and received the accreditation support material concerning the Postgraduate Study Programmes (henceforth PSPs) in Algorithms, Logic, and Discrete Mathematics (ALMA) as well as in Secure Telecommunications and Network Systems (STNS), on Friday September 1st. The online visit to the Programmes began on the following Monday, September 4rth. As a result, there was very little time to look into the supporting material before the beginning of the visit, and most of the analysis of the relevant information had to be made during the visit.

The quality of the support material was excellent. All documents (i.e. Student Guides, the Accreditation Proposals or the Courses Descriptions, etc.) were very well crafted and designed. Some documents with statistical treatment (for instance, Students' Evaluations) were partially incomplete as the Panel will explain later in this report. Despite this, during the visit, all the participants involved (MODIP, Teaching and Administrative staff) were very prompt to provide us with all the information asked for. All the meetings were conducted online utilising WebEx from Monday Sept. 4th to Wednesday Sept. 6th in a very friendly and cooperative spirit. The meetings during the visit were scheduled as follows:

At the welcome meeting, the EEAP met with the Directors of the two PSP, the Head of the Department, MODIP, Steering Committees/ OMEA members to discuss the compliance of the PSP to the Quality Standards for Accreditation. At the same time, the department provided us with access to a video to have a visual representation of the buildings, grounds, and library. After the end of this meeting, the EEAP members met in a separate zoom meeting to discuss and reflect on their first impressions and prepare for the next day.

The following day, Sept. 5th, at 15:00 the Panel started a sequence of online meeting that lasted until 19:30. The teleconferences started with the teaching staff members of the PSP, followed by students, graduates and ended with employers/social partners. The following day, Sept. 6th, EEAP had its last follow-up meeting with the OMEA and MODIP representatives during which additional comments and clarifications were brought up. The EEAP gave a short preliminary verbal report about their impressions and findings of the virtual visit. The EEAP thanked everyone for their participation, cooperation, and virtual hospitality.

# III. Postgraduate Study Programme Profile

The STNS Programmed was established in 2019 in cooperation with Greek Army Directorate of Telecommunications & Electronics for the Greek Army Officers. It leads to a Masters degree with two specialisation areas: Telecommunications Systems & Network Systems. It places heavy emphasis on Defence Technologies and the needs of the Greek Ministry of Defense. Every year the programme accepts a maximum of 28 students. Their studies are financed by the Greek Ministry of Defense. The duration of the programme is 3 semesters with 90 ECTS (72 ECTS for graduate courses & 18 ECTS for a thesis).

# PART B: COMPLIANCE WITH THE PRINCIPLES

PRINCIPLE 1: QUALITY ASSURANCE POLICY AND QUALITY GOAL SETTING FOR THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit should be in line with the quality assurance policy of the Institution and must be formulated in the form of a public statement, which is implemented by all stakeholders. It focuses on the achievement of special goals related to the quality assurance of the study programmes offered by the academic unit.

Indicatively, the quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the postgraduate study programme (PSP), its purpose and field of study; it will realise the programme's goals and it will determine the means and ways for attaining them; it will implement appropriate quality procedures, aiming at the programme's improvement.

In particular, in order to implement this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:

- a) the suitability of the structure and organisation of postgraduate study programmes
- b) the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education level 7
- c) the promotion of the quality and effectiveness of teaching at the PSP
- d) the appropriateness of the qualifications of the teaching staff for the PSP
- e) the drafting, implementation, and review of specific annual quality goals for the improvement of the PSP
- f) the level of demand for the graduates' qualifications in the labour market
- g) the quality of support services, such as the administrative services, the libraries and the student welfare office for the PSP
- h) the efficient utilisation of the financial resources of the PSP that may be drawn from tuition fees
- i) the conduct of an annual review and audit of the quality assurance system of the PSP through the cooperation of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU)

#### **Documentation**

- Quality Assurance Policy of the PSP
- Quality goal setting of the PSP

#### **Study Programme Compliance**

# I. Findings

The nature of STNS programme is unique. It educates and trains Greek Army officers on the latest and greatest advances in Secure Telecommunications & Networks. As such the specialized part of the curriculum is classified and not available to the public for obvious

reasons. Because of that reason the EEAP only comments on the publicly available information of the programme.

# II. Analysis

The EAAP has determined that the Department's curriculum, its learning and teaching methods, the quality assurance provision, and the expanding monitoring and enhancement mechanisms, meet fully the expected national and international standards of educational provision in Secure Telecommunications and Network Systems. It is the opinion of the EAAP that the Program is on a positive trajectory of developmental growth, and it is expected to continue to serve its military students well in the future, based on the high quality of its faculty.

The EAAP recognizes the tremendous efforts which faculty have made for the first few years of operation and recognizes their significant contributions. Hence, the quality assurance processes concerning the monitoring, feedback and academic attainment, the reflection on teaching methods, the embedding of research into teaching, are well established. In line with the earlier observations, the Department's OMEA has done a great deal of work under the auspices of the University's MODIP.

#### III. Conclusions

The EAAP recognizes the strong teaching and research ethos which underpins the academic team of the Department. The annual review of the programme, whose purpose is to collate feedback from all the relevant stakeholders is viewed by the EAAP as satisfactory. The process followed thus far has been sufficiently reflective and pluralistic. Due to the capacity of students as Greek Army officers the feedback from questionnaires reaches an impressive statistic of 100%. As a result of that, one of the primary quality assurance practices of direct student feedback acquisition through the administration of questionnaires is robust and measurable.

# **Panel Judgement**

Principle 1: Quality assurance policy and quality goal setting	
for the postgraduate study programmes of the institution and	
the academic unit	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

# **Panel Recommendations**

EEAP recommends every effort to be made for the rest branches of the Greek Armed Forces to take advantage of this high-quality program.

#### PRINCIPLE 2: DESIGN AND APPROVAL OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS SHOULD DEVELOP THEIR POSTGRADUATE STUDY PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE POSTGRADUATE STUDY PROGRAMMES. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES AND THE EMPLOYMENT PROSPECTS ARE SET OUT IN THE PRORAMME DESIGN. DURING THE IMPLEMENTATION OF THE POSTGRADUATE STUDY PROGRAMMES, THE DEGREE OF ACHIEVEMENT OF THE LEARNING OUTCOMES SHOULD BE ASSESSED. THE ABOVE DETAILS, AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

The academic units develop their postgraduate study programmes following a well-defined procedure. The academic profile and orientation of the programme, the research character, the scientific objectives, the specific subject areas, and specialisations are described at this stage.

The structure, content and organisation of courses and teaching methods should be oriented towards deepening knowledge and acquiring the corresponding skills to apply the said knowledge (e.g. course on research methodology, participation in research projects, thesis with a research component).

The expected learning outcomes must be determined based on the European and National Qualifications Framework (EQF, NQF), and the Dublin Descriptors for level 7. During the implementation of the programme, the degree of achievement of the expected learning outcomes and the feedback of the learning process must be assessed with the appropriate tools. For each learning outcome that is designed and made public, it is necessary that its evaluation criteria are also designed and made public.

In addition, the design of PSP must consider:

- the Institutional strategy
- the active involvement of students
- the experience of external stakeholders from the labour market
- the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS) for level 7
- the option of providing work experience to students
- the linking of teaching and research
- the relevant regulatory framework and the official procedure for the approval of the PSP by the Institution

The procedure of approval or revision of the programmes provides for the verification of compliance with the basic requirements of the Standards by the Institution's Quality Assurance Unit (QAU).

# **Documentation**

- Senate decision for the establishment of the PSP
- PSP curriculum structure: courses, course categories, ECTS awarded, expected learning outcomes according to the EQF, internship, mobility opportunities
- Labour market data regarding the employment of graduates, international experience in a relevant scientific field
- PSP Student Guide
- Course and thesis outlines
- Teaching staff (name list including of areas of specialisation, its relation to the courses taught, employment relationship, and teaching assignment in hours as well as other teaching commitments in hours)

## **Study Programme Compliance**

# I. Findings

The program on Secure Telecommunications and Network Systems (STNS) is a collaboration between the National Kapodistrian University of Athens (NKUA), and STHAD, the School of Telecommunications and Electronics for Signal Corps Officers (STHAD) of the Greek Army. Its courses are taught by NKUA Faculty, complemented by faculty from other Greek Universities, or external instructors, as necessary, who are selected by a process specifying the selection criteria.

The nature of STNS programme is unique in that it educates and trains Greek Army officers on the latest advances in Secure Telecommunications & Networks. As such the specialised part of the curriculum is classified and not available to the public. Therefore, the EEAP can only comments on the publicly available information of the programme. As a consequence, it is difficult for the EAAP to comment on the design and approval of this program.

# II. Analysis

Based on the available public information, the EAAP thinks that the goals, the curriculum, the learning and teaching methods and the quality assurance processes meet fully the expected national and international educational standards, and that the program trains its military students well.

#### III. Conclusions

The EAAP acknowledges the high scientific level of the faculty as well as the tremendous efforts which the faculty have made for the first few years of operation and recognizes the significant contributions of the programme to the national army.

# **Panel Judgement**

Principle 2: Design and approval of postgraduate study	
programmes	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

### **Panel Recommendations**

Consider the possibility of creating a similar programme on a different subject of significance to the Greek army (space?).

# PRINCIPLE 3: STUDENT-CENTRED LEARNING, TEACHING, AND ASSESSMENT

INSTITUTIONS SHOULD ENSURE THAT POSTGRADUATE STUDY PROGRAMMES PROVIDE THE NECESSARY CONDITIONS TO ENCOURAGE STUDENTS TO TAKE AN ACTIVE ROLE IN THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

Student-centred learning and teaching plays an important role in enhancing students' motivation, their self-evaluation, and their active participation in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.

The student-centred learning and teaching process

- respects and attends to the diversity of students and their needs by adopting flexible learning paths
- considers and uses different modes of delivery, where appropriate
- flexibly uses a variety of pedagogical methods
- regularly evaluates and adjusts the modes of delivery and pedagogical methods aiming at improvement
- regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys
- strengthens the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff
- promotes mutual respect in the student-teacher relationship
- applies appropriate procedures for dealing with the students' complaints
- provides counselling and guidance for the preparation of the thesis

#### In addition

- The academic staff are familiar with the existing examination system and methods and are supported in developing their own skills in this field.
- The assessment criteria and methods are published in advance. The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary is linked to advice on the learning process.
- Student assessment is conducted by more than one examiner, where possible.
- Assessment is consistent, fairly applied to all students and conducted in accordance with the stated procedures.
- A formal procedure for student appeals is in place.
- The function of the academic advisor runs smoothly.

#### **Documentation**

- Sample of a fully completed questionnaire for the evaluation of the PSP by the students
- Regulations for dealing with students' complaints and appeals
- Regulation for the function of academic advisor
- Reference to the teaching modes and assessment methods

# **Study Programme Compliance**

#### I. Findings

The available courses cover a wide spectrum of the PSP's applied field. Most of them include multiple assessment methods, equally contributing to a student's final assessment. However, the assessment criteria could not be evaluated, since they become available

during lectures or after enrolment to the corresponding course. Furthermore, personal attendance on university grounds is required for the delivery of all available courses.

Students are encouraged to develop individual skills, by participating in individual assessments. The large availability of elective courses also contributes to the students' individual growth. Students report excellent relations with the faculty, both during delivery and evaluation of the available courses. Students also expressed the need for a security-focused course, as well as the instruction of a programming language for the purposes of the PSP. The EEAP received assurances from the teachers participating in the PSP that the implementation of a programming language course is underway. Evaluation is performed annually, as directed by MODIP.

Lastly, the availability of formal procedures for student appeals, as well as the successful application of student advisory was confirmed.

# II. Analysis

The PSP seems to comply with the directives of student-centred learning and teaching, by promoting interaction among students and faculty, as well as developing students' individual skills. The teaching processes are also open to correction and constant improvement through regulated and systematic evaluations, as well as the excellent interaction of the faculty with the student body. The teaching staff also appear to be fully aware of the needs of the PSP and take appropriate action.

#### III. Conclusions

The PSP fully complies with the Principle.

#### **Panel Judgement**

Principle 3: Student-cent	red learning,
teaching, and assessment	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

# **Panel Recommendations**

It is recommended that a security-focused course is implemented, as well as a course on the instruction of an appropriate programming language.

PRINCIPLE 4: STUDENT ADMISSION, PROGRESSION, RECOGNITION OF POSTGRADUATE STUDIES, AND CERTIFICATION.

INSTITUTIONS SHOULD DEVELOP AND APPLY PUBLISHED REGULATIONS COVERING ALL ASPECTS AND PHASES OF STUDIES (ADMISSION, PROGRESSION, THESIS DRAFTING, RECOGNITION AND CERTIFICATION).

All the issues from the beginning to the end of studies should be governed by the internal regulations of the academic units. Indicatively:

- the student admission procedures and the required supporting documents
- student rights and obligations, and monitoring of student progression
- internship issues, if applicable, and granting of scholarships
- the procedures and terms for the drafting of assignments and the thesis
- the procedure of award and recognition of degrees, the duration of studies, the conditions for progression and for the assurance of the progress of students in their studies
- the terms and conditions for enhancing student mobility

All the above must be made public in the context of the Student Guide.

#### **Documentation**

- Internal regulation for the operation of the Postgraduate Study Programme
- Research Ethics Regulation
- Regulation of studies, internship, mobility, and student assignments
- Degree certificate template

# **Study Programme Compliance**

# I. Findings

Full documentation regarding the PSP's services was provided and is available online. The students also reported regular interactions with the teaching and administrative staff. Given the military subject of the PSP, there is no practical training in place other than the Greek Military Forces, or any mobility options.

The PSP has a complete Student Guide, along with instructions for the implementation of its thesis. While there is no Thesis Handbook available, the assessment criteria and methods for the PSP's thesis are available in the Student Guide and the Course Descriptions. A Code of Research Ethics for the PSP was also available. Lastly, the Diploma Supplement is issued without request and free of charge both in Greek and English.

# II. Analysis

The PSP follows the Principles guidelines for the regulation of its studies. The Student Guide contains all necessary information and assessment criteria for the PSP's thesis. However, the issue of a Thesis Handbook is highly recommended. Given the nature of the PSP, practical training is not available. Finally, the student progression is monitored through the use of the secretariat's electronic system.

#### III. Conclusions

The PSP fully complies with the Principle.

# **Panel Judgement**

Principle 4: Student admission, progression, recognition	
of postgraduate studies and certification	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

# **Panel Recommendations**

It is highly recommended that the PSP issues a Thesis handbook, to provide clear and concise instructions for conducting its theses.

#### **PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES**

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE LEVEL OF KNOWLEDGE AND SKILLS OF THEIR TEACHING STAFF, AND APPLY FAIR AND TRANSPARENT PROCESSES FOR THEIR RECRUITMENT, TRAINING AND FURTHER DEVELOPMENT.

The Institution should attend to the adequacy of the teaching staff of the academic unit teaching at the PSP, the appropriate staff-student ratio, the appropriate staff categories, the appropriate subject areas, the fair and objective recruitment process, the high research performance, the training- development, the staff development policy (including participation in mobility schemes, conferences, and educational leaves-as mandated by law).

More specifically, the academic unit should set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff for the PSP and offer them conditions of employment that recognise the importance of teaching and research; offer opportunities and promote the professional development of the teaching staff; encourage scholarly activity to strengthen the link between education and research; encourage innovation in teaching methods and the use of new technologies; promote the increase of the volume and quality of the research output within the academic unit; follow quality assurance processes for all staff (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.

#### **Documentation**

- Procedures and criteria for teaching staff recruitment
- Employment regulations or contracts, and obligations of the teaching staff
- Policy for staff support and development
- Individual performance of the teaching staff in scientific-research and teaching work, based on internationally recognised systems of scientific evaluation (e.g. Google Scholar, Scopus, etc.)
- List of teaching staff including subject areas, employment relationship, Institution of origin, Department of origin

#### **Study Programme Compliance**

# I. Findings

The Secure Telecommunications and Network System (KPMS) program is a collaboration between the Department of Informatics and Telecommunication (DIT) within the National and Kapodistrian University of Athens (NKUA), and the School of Telecommunications and Electronics for Signal Corps Officers (STHAD) of the Signal Corps within the Greek Army. The KPMS courses are taught by DIT Faculty, complemented by faculty from other Greek Universities, or external instructors, as necessary, to cover the needed areas of expertise. The hiring (or the promotion) of any faculty member in Greek universities is controlled by strict guidelines specified by the Ministry of Education and the rules of the institutions.

# II. Analysis

The teaching needs for courses calling for expertise outside what is covered by the current faculty is satisfied by external instructors, who are also selected by a process specifying the selection criteria.

The teaching load varies between 3 and 6 hours (one or two courses), without counting preparation time, grading of assignments, and guidance to students. At the end of each course, the students are asked to provide an assessment regarding the course and the instructor. A statistical analysis is done on the data collected and is given as feedback to the instructor to help them improve the teaching of the course. The plan is sensible, but the collection of data is more consistent and regular for the courses conducted within STHAD than courses taught to a mixture of the KPMS students and civilian students. This is a general issue for courses offered in the regular university environment, and the DIT department and the University are trying to address it.

#### III. Conclusions

The effort of the professional development of the faculty is primarily a task at the Department, rather than the program, level. In general, there is an effort to offer support to faculty for attending at least one conference per year, and mobility to interact with other universities at the international level is encouraged and has been achieved.

# **Panel Judgement**

Principle 5: Teaching staff of postgraduate study programmes	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

#### **Panel Recommendations**

None.

#### **PRINCIPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT**

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER THE TEACHING AND LEARNING NEEDS OF THE POSTGRADUATE STUDY PROGRAMME. THEY SHOULD –ON THE ONE HAND- PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARING AND STUDENT SUPPORT, AND – ON THE OTHER HAND- FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, NETWORKS, CAREER AND SOCIAL POLICY SERVICES ETC.).

Institutions and their academic units must have sufficient resources and means, on a planned and long-term basis, to support learning and academic activity in general, so as to offer PSP students the best possible level of studies. The above means include facilities such as the necessary general and more specialised libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, IT and communication services, support and counselling services.

When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed students, students with disabilities), in addition to the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. However, the internal quality assurance proves -on the one hand- the quantity and quality of the available facilities and services, and -on the other hand- that students are aware of all available services.

In delivering support services, the role of support and administration staff is crucial and therefore this segment of staff needs to be qualified and have opportunities to develop its competences.

#### **Documentation**

- Detailed description of the infrastructure and services made available by the Institution to the academic unit for the PSP, to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding firm commitment of the Institution to financially cover these infrastructure-services from state or other resources
- Administrative support staff of the PSP (job descriptions, qualifications and responsibilities)
- Informative / promotional material given to students with reference to the available services
- Tuition utilisation plan (if applicable)

#### **Study Programme Compliance**

#### I. Findings

The academic unit provides several services to the PSP, namely access to the university library, IT infrastructure, as well as classrooms for the delivery of lectures. However, a full inspection of the premises could not be facilitated due to the nature of the current assessment.

The PSP students have access to the same infrastructure and services of the Department as the undergraduate ones. As such, facilities as boarding services, career counselling, student welfare, as well as sport and cultural facilities and student groups are available. These services are well known to the student body. The administration of the PSP appears satisfactory.

Lastly, given the fact that the PSP does not require tuition, a tuition utilisation plan is not applicable.

# II. Analysis

The Department provides all the necessary facilities and services for the PSP needs. The student body is well aware of the facilities and services available. The administration staff appears adequate and ensures the smooth operation of the PSP.

# III. Conclusions

The PSP fully complies with the Principle.

# **Panel Judgement**

Principle 6: Learning resources and student support	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

# **Panel Recommendations**

None.

#### **PRINCIPLE 7: INFORMATION MANAGEMENT**

INSTITUTIONS BEAR FULL RESPONISBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF POSTGRADUATE STUDY PROGRAMMES AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASLILY ACCESSIBLE WAY.

Institutions are expected to establish and operate an information system for the management and monitoring of data concerning students, teaching staff, course structure and organisation, teaching and provision of services to students.

Reliable data is essential for accurate information and decision-making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on postgraduate study programmes and other activities feed data into the internal system of quality assurance.

The information collected depends, to some extent, on the type and mission of the Institution. The following are of interest:

- key performance indicators
- student population profile
- student progression, success, and drop-out rates
- student satisfaction with their programmes
- availability of learning resources and student support

A number of methods may be used to collect information. It is important that students and staff are involved in providing and analysing information and planning follow-up activities.

#### **Documentation**

- Report from the National Information System for Quality Assurance in Higher Education (NISQA) at the level of the Institution, the department, and the PSP
- Operation of an information management system for the collection of administrative data for the implementation of the PSP (Students' Record)
- Other tools and procedures designed to collect data on the academic and administrative functions of the academic unit and the PSP

# **Study Programme Compliance**

# Findings

Formal and systematic processes for eliciting extended data from all internal and external stakeholders of a programme may provide thorough input for periodic review of the programme and quality assurance purposes and facilitate a decision-making approach upon further actions toward program's effectiveness. For obvious reasons, parts of the present programme are classified, therefore such a thorough input is not possible to achieve.

#### II. Analysis

Although parts of the information pertaining to this programme are classified it would be useful to use the information elicited by questionnaires addressed to students and to alumni as well (in the present case such questionnaires would be filled by all students for obvious reasons). Such information could be used to derive various KPIs concerning the programme.

# III. Conclusions

There is a need for a more systematic information management regarding the programme, namely: what data to collect; how to analyse it; and how to present the analysis results following a number of KPIs useful to the program's operation and evolution.

# **Panel Judgement**

Principle 7: Information management	
Fully compliant	
Substantially compliant	Х
Partially compliant	
Non-compliant	

#### **Panel Recommendations**

The information management of data concerning the programme should be better organised.

#### PRINCIPLE 8: Public Information Concerning the Postgraduate Study Programmes

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES RELATED TO THE POSTGRADUATE STUDY PROGRAMMES IN A DIRECT AND READILY ACCESSIBLE WAY. THE RELEVANT INFORMATION SHOULD BE UP-TO-DATE, OBJECTIVE AND CLEAR.

Information on the Institutions' activities is useful for prospective and current students, graduates, other stakeholders, and the public.

Therefore, Institutions and their academic units must provide information about their activities, including the PSP they offer, the intended learning outcomes, the degrees awarded, the teaching, learning and assessment procedures applied, the pass rates, and the learning opportunities available to their students. Information is also provided on the employment perspectives of PSP graduates.

#### **Documentation**

- Dedicated segment on the website of the department for the promotion of the PSP
- Bilingual version of the PSP website with complete, clear and objective information
- Provision for website maintenance and updating

# **Study Programme Compliance**

# I. Findings

Due to the highly classified and sensitive nature of this program there is no substantial web presence.

## II. Analysis

During the first academic year army officers follow the curriculum of the rest of the civilian students. The web presence of this portion of the programme is commendable and satisfactory.

#### III. Conclusions

EEAP's judgement is based on the public portion of the website which is of high standards.

# **Panel Judgement**

Principle 8: Public information concerning the postgraduate study programmes	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

# **Panel Recommendations**

None.

# PRINCIPLE 9: On-GOING MONITORING AND PERIODIC INTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS AND ACADEMIC UNITS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR POSTGRADUATE STUDY PROGRAMMES, SO AS TO ACHIEVE THE OBJECTIVES SET FOR THEM, THROUGH MONITORING AND POSSIBLE AMENDMENTS, WITH A VIEW TO CONTINUOUS IMPROVEMENT. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

The regular monitoring, review, and revision of postgraduate study programmes aim at maintaining the level of educational provision and creating a supportive and effective learning environment for students.

The above comprise the evaluation of:

- a) the content of the programme in the light of the latest research in the given discipline, thus ensuring that the PSP is up to date
- b) the changing needs of society
- c) the students' workload, progression and completion of the postgraduate studies
- d) the effectiveness of the procedures for the assessment of students
- e) the students' expectations, needs and satisfaction in relation to the programme
- f) the learning environment, support services, and their fitness for purpose for the PSP in question Postgraduate study programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date.

#### **Documentation**

- Procedure for the re-evaluation, redefinition and updating of the PSP curriculum
- Procedure for mitigating weaknesses and upgrading the structure of the PSP and the learning process
- Feedback processes concerning the strategy and quality goal setting of the PSP and relevant decision-making processes (students, external stakeholders)
- Results of the annual internal evaluation of the PSP by the Quality Assurance Unit (QAU), and the relevant minutes

# **Study Programme Compliance**

# I. Findings

NKUA (National and Kapodistrian University of Athens) has established a Quality Assurance Unit, MODIP (Greek acronym), for all the entities within the university. MODIP follows the Internal Evaluation Group (IEG) to derive assessment for the different activities it monitors. Part of that task is the periodic internal evaluation of the Study Programs within Secure Telecommunications & Network Systems (STNS). MODIP examines the content of the Study Program, course load and student progress towards graduation, student satisfaction with offered services, etc.

# II. Analysis

For such assessment, there is participation of all interested parties, including students, faculty, administration, and the departmental Internal Assessment Team (OMEA). It is done

annually, but the evidence shown to the Evaluation Panel was only for one such assessment, probably because the program is very new (one cohort has graduated and the second cohort is now in progress). Yet, there is a clear timeline of the different actions expected in the annual cycle.

#### III. Conclusions

The results of such assessment are discussed, and actions are identified, together with the person(s) responsible for their implementation and the corresponding target dates. Besides the University Quality Assurance team, the STHAD Commander is also involved in the evaluation of the results and the steps taken to address any weaknesses. For courses having military content, where no civilian students participate, the actions are kept confidential for security reasons. The regular university courses of the program are treated in the same way as all other university courses.

## **Panel Judgement**

Principle 9: On-going monitoring and period evaluation of postgraduate study programmes	lic internal
Fully compliant	
Substantially compliant	х
Partially compliant	
Non-compliant	

#### **Panel Recommendations**

- At the non-STHAD courses offered at NKUA, experiment with student feedback forms on paper, collected in class.
- At the non-STHAD courses offered at NKUA, develop the statistics by course and by instructor.
- Do an analysis of the longer-term trends by cohort (i.e., the group admitted in a single year).

#### PRINCIPLE 10: REGULAR EXTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES

THE POSTGRADUATE STUDY PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY PANELS OF EXTERNAL EXPERTS SET BY HAHE, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HAHE.

HAHE is responsible for administrating the PSP accreditation process which is realised as an external evaluation procedure, and implemented by panels of independent experts. HAHE grants accreditation of programmes, based on the Reports delivered by the panels of external experts, with a specific term of validity, following to which, revision is required. The quality accreditation of the PSP acts as a means for the determination of the degree of compliance of the programme to the Standards, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees. Both academic units and Institutions must consistently consider the conclusions and the recommendations submitted by the panels of experts for the continuous improvement of the programme.

#### **Documentation**

 Progress report of the PSP in question, on the results from the utilisation of possible recommendations included in the External Evaluation Report of the Institution, and in the IQAS Accreditation Report, with relation to the postgraduate study programmes

# **Study Programme Compliance**

## I. Findings

The evaluation by the External Evaluation and Accreditation Panel (EEAP) is intended to assist in the HAHE decision on the accreditation of the program. The KPMS Program appears to have a concrete plan to review the EEAP comments and plan any corrective actions, if necessary.

#### II. Analysis

The Evaluation Panel feels that the plan of action is comprehensive and well-thought out. Since this is the first time the KPMS goes through the accreditation process, the results of following the plan of action will be evaluated in subsequent accreditation reviews.

#### III. Conclusions

The program Leadership is encouraged to apply any suggestions of improvements from this and related programs in the Department, to make the work of the EEAP easier, and to bring out the strengths of the program. It is understood that an accreditation by HAHE will have a 5-year duration.

# Panel Judgement

Principle 10: Regular external evaluation of postudy programmes	ostgraduate
Fully compliant	Χ
Substantially compliant	
Partially compliant	
Non-compliant	

# **Panel Recommendations**

None.

# **PART C: CONCLUSIONS**

# I. Features of Good Practice

- The very existence of this program is of critical importance for country's national security
- Mixing military and civilian students in classrooms during the first part of the programme is mutually beneficial
- The Greek army officers/students work very hard and some of them seriously consider continuing for doctoral degrees
- Graduating officers are moving up faster the military hierarchy
- The development Master's Theses on cutting edge of Military needs
- The excellent cooperation between the academic and military leadership of the program results in the excellent quality of programme

### II. Areas of Weakness

- The way statistics are analysed by MODIP at NKUA
- The program lacks specialised courses in network and software security
- Lack of some supporting software tools like Turnitin
- While there is a lack of a Thesis Handbook, the Panel was informed afterwards that a Thesis handbook is available at the STHAD library, but it is considered classified.

# III. Recommendations for Follow-up Actions

- EEAP recommends every effort to be made for the rest branches of the Greek Armed Forces to take advantage of this high-quality program.
- It is recommended that a security-focused course is implemented, as well as a course on the instruction of an appropriate programming language.
- It is highly recommended that the PSP issues a Thesis handbook, to provide clear and concise instructions for conducting its theses.
- At the non-STHAD courses offered at NKUA, experiment with student feedback forms on paper, collected in class.
- At the non-STHAD courses offered at NKUA, develop the statistics by course and by instructor.
- Do an analysis of the longer-term trends by cohort (i.e., the group admitted in a single year).
- (This is a suggestion to HAHE): Consider the expansion of future EEAPs with a qualified military officer for this particular Programme.

# IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: 1, 2, 3, 4, 5, 6, 8, and 10.

The Principles where substantial compliance has been achieved are: 7, and 9.

The Principles where partial compliance has been achieved are: None.

The Principles where failure of compliance was identified are: None.

Overall Judgement	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

# The members of the External Evaluation & Accreditation Panel

Name and Surname Signature

# 1. Dr. Sotiris Skevoulis (Chair)

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# 2. Mr. George Kolipetris

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# 3. Prof. Emeritus Panos Papamichalis

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