

NATIONAL CENTER FOR PROFESSIONAL EDUCATION QUALITY ASSURANCE FOUNDATION



**EXPERT PANEL REPORT**

**ON INSTITUTIONAL ACCREDITATION CARRIED OUT AT MARSHAL KHANPERYANTS  
MILITARY AVIATION UNIVERSITY OF RA MINISTRY OF DEFENSE**

**Yerevan 2018**

## INTRODUCTION

Institutional Accreditation of Marshal Armenak Khanperyants Military Aviation University of RA Ministry of Defence (MoD) (hereinafter referred to as MAU) is carried out based on the application presented by the University. The process of institutional accreditation is organized and coordinated by the National Center for Professional Education Quality Assurance Foundation (ANQA).

ANQA is guided by the regulation on “State Accreditation of RA Institutions and their Educational Programs” set by the RA Government on 30 June, 2011 in N978 decree as well as by N959-Ն (30 June, 2011) decree on approving RA Standards for Professional Education Accreditation.

The expertise was carried out by the expert panel formed according to the requirements of ANQA Regulation on the Formation of the Expert Panel. The expert panel consisted of 4 local experts and 1 expert from Russian Federation.

Institutional accreditation aims not only at the external evaluation of quality assurance but also to the continuous improvement of the institution’s management and quality of educational programs. Hence, there were two important issues for the expert panel members:

1. To carry out an expertise of institutional capacities in line with the RA standards for state accreditation
2. To carry out an evaluation for the improvement of university’s quality and for its integration to the European Higher Education Area (EHEA).

The report includes the results of the evaluation of MU’s institutional capacities according to the state criteria and standards for accreditation as well as the results of peer review by the international expert from the perspective of being integrated into EHEA.

## CONTENT

INTRODUCTION .....	2
SUMMARY OF THE EVALUATION .....	4
<i>PEER-REVIEW OF INSTITUTIONAL CAPACITIES ACCORDING TO STATE ACCREDITATION     CRITERIA</i> .....	4
PEER-REVIEW FROM THE PERSPECTIVE OF EDUCATION INSTITUTION'S INTEGRATION INTO EUROPEAN HIGHER EDUCATION AREA.....	10
DESCRIPTION OF EXPERTISE .....	12
Composition of the expert panel .....	12
THE PROCESS OF EXPERTISE.....	13
Application for state accreditation.....	13
BRIEF INFORMATION ABOUT THE INSTITUTION .....	15
I. MISSION AND GOALS.....	16
III. ACADEMIC PROGRAMS.....	23
IV. STUDENTS.....	26
V. TEACHING AND SUPPORT STAFF .....	30
VI. RESEARCH AND DEVELOPMENT .....	36
VII. INFRASTRUCTURE AND RECOURSES.....	39
VIII. SOCIAL RESPONSIBILITY.....	44
IX.EXTERNAL RELATIONS AND INTERNATIONALIZATION.....	47
X. INTERNAL QUALITY ASSURANCE SYSTEM .....	49
EVALUATION ACCORDING TO ACCREDITATION CRITERIA.....	53
APPENDIX 1.CVS OF EXPERT PANEL MEMBERS.....	54
APPENDIX 2. SCHEDULE OF SITE-VISIT .....	55
APPENDIX 3. LIST OF OBSERVED DOCUMENTS .....	57
APPENDIX 4. OBSERVED RESOURCES.....	60
APPENDIX 5. MAU ORGANIZATIONAL STRUCTURE .....	Ошибка! Закладка не определена.

## SUMMARY OF THE EVALUATION

### *PEER-REVIEW OF INSTITUTIONAL CAPACITIES ACCORDING TO STATE ACCREDITATION CRITERIA*

The expertise was carried out by the expert panel formed according to the requirements of ANQA Regulation on the Formation of the Expert Panel. The evaluation was carried out according to the 10 criteria set by the RA Government on 30 June, 2011 N 959-Ն decree.

While carrying out the evaluation the Expert panel took into consideration that according to the mission the Military Aviation University “is a higher military education institution implementing BA and additional educational programs within the system of RA MoD and based on the national educational experience and international tendencies of military education sphere directs its activities towards preparation and training of specialists with the professions of military aviation, anti-aircraft defence in order to satisfy the educational and military needs of RA MoD”. The main aim of MAU is provision of educational services, creation and implementation of military and military scientific programs to satisfy the needs of RA AF.

The Expert panel mentions that MAU policy and activities are generally in line with the University’s mission which is in compliance with RA NQF. The development of the strategic plan was carried out in line with 2016-2020 development plan of RA AF with the parts concerning military education and MAU. The Expert panel finds it positive that the stakeholders take part in strategic planning process. The scope of MAU external stakeholders involve RA AF General staff, interested departments of RA MoD, RA military units which later recruit the graduates of MAU, and the internal stakeholders are teaching, administrative and support staffs, cadets. The Expert panel finds it necessary that MAU should pay attention to the progress of education which will foster the development of University interests and the study of innovations.

The Expert panel mentions that there is a permanent contact with alumni, opinions about the alumni are always presented from military units and based on that feedback academic programs are revised. The Expert panel points out that the opinions about the alumni got from military units should regularly be discussed with the heads of chairs and teaching staff in order to make the changes made in the academic programs purposeful.

MAU prepares BA specialists of higher military education with 4 year and 5year academic programs, one year courses on “Exploitation of Anti-aircraft Defence Means” and “Military Technique of Radio Connection” as well as organizes courses for the enhancement of qualification of officers’ staff. In the ■■■ faculties of the University ■■■ academic programs are implemented and the profession of “Exploitation and Application of Unmanned Aerial Vehicles” was first invested in this academic year.

When developing MAU academic programs, formulating learning outcomes together with state educational standards MAU mission was also taken into consideration creating alignment also with the descriptors of the 6<sup>th</sup> level of NQF. An attempt is made to align academic program LOs to Dublin descriptors and ABET criteria. The Expert panel positively evaluates the fact that MAU academic programs are regularly reviewed and improved based on the feedback of external stakeholders. It is worth mentioning that GMI operating under immediate supervision of RA President every 5 years conducts evaluation of University activities including academic programs, proficiency of main and changing staff based on clearly defined criteria.

During the examination MAU is viewed both as military unit and as a military education institution. However it should be mentioned that the involvement of cadets in the revision process of academic programs is weak and it hinders full participation of cadets in the organization of their education. The analysis of the Expert panel show that the subjects of engineering block are few in the academic programs and this can hinder the formation of respective competences. During teaching subject based approach is applied which fosters development of analytical and managerial competences of cadets. The Expert panel finds it necessary for MAU to promote investment and application of innovative methods during the teaching process that will foster development of research skills of cadets and will enhance the level of their responsibility.

The Expert panel finds it positive that there is high quality teaching and support staffs for the implementation of academic programs at MAU. The positioning at MAU is based on competition which is organized jointly by MAU and RA MoD. The requirements for professional qualities of the teaching staff at MAU per academic program are very generic there are no job descriptions for different categories of the teaching staff. AT the same time there is a danger of generation change for some professions as there are few specialists of some narrow professional courses.

The analysis of Expert panel showed that the workload of the teaching staff is great and it hinders implementation of research activities by the lecturers. From the perspective of the staff recruitment the Expert panel highlights the importance for MAU to collaborate with civic universities in terms of basic subjects. It is also important to assure the existence of two or more lecturers for one subject this will foster decrease of workload and will promote collegial communication among the lecturers. Training and activities towards the enhancement of qualification are regularly organized at MAU also short-term and long-term business trips are implemented for trainings. Evaluation of teaching staff is organized at MAU through surveys among the cadets as well as through class observations, monitoring by the Department of QA and analysis, analysis of the dynamics of annual academic progress of cadets and all these foster the improvement of teaching quality.

The Expert panel finds that in general the resources of MAU ensure the implementation of academic programs. At the same time it is important for MAU and RA MoD to find ways towards developing the assurance of MAU with necessary resources. Professional cabinets, laboratories and training centers need to be replenished with necessary technical resources and the participants of the meetings with Expert panel also mentioned this.

The surveys conducted at MAU show that the cadets and teaching staff are not satisfied with library resources which is worrying from the perspective of acquisition of LOs of academic programs. Because of the lack of some equipment, laboratories and techniques at MAU some lessons are organized in military units or in civil universities. During the meetings with cadets and the teaching staff it became clear that their dominant part finds that conduction of those lessons immediately at MAU will be more effective, will save time and will decrease the expenses on transportation.

There are clear mechanisms of cadet recruitment and admission at MAU. For the recent years there is a decrease of cadets in the faculty of Anti-aircraft Defense as compared to the number of applicants in the Aviation Faculty. The results of site-visit as well as the results of surveys conducted by the Department of QA and Analysis it became clear that cadets are mainly satisfied with learning environment and organization of education. The cadets have the opportunities to participate in

research activities together with the teaching staff at the same time their more active involvement in scientific research activities will promote the development of analytical skills of the cadets.

There are mechanisms for the evaluation of consultancy and educational services of cadets at MAU and this fosters improvement of quality of the provided services.

There is a strategy expressing MAU's interests and ambitions in research sphere however the sequence of steps for the research topics are not defined and the professional directions of MAU are not reflected. The equalization of military ranks with scientific degree at MAU is not always justified and it endangers the effectiveness of implementation of scientific-research activities at MAU. The link among the University and scientific institutions in terms of research is weak, instead it could have been expressed with the implementation of joint scientific projects. The limited number of publications by the staff of the University is bothering as it shows low activeness of implementation of research activities. The implemented research is not a component of educational process and it can have negative effect on the formation of LOs.

The Expert panel finds it important for MAU to promote innovative studies/research with the involvement of both teaching staff and cadets. The functions of the University in the sphere of international relations and cooperation are very limited and this process is regulated by RA MoD respective department. At the same time the opportunities for overcoming the obstacles of international cooperation have not been yet observed by the University and it hinders later development of internationalization and external relations. Currently there are no planned activities, sufficient financial and human resources to ensure comprehensive development of external relations, enlargement of integration into EHEA, cooperation with foreign military education institutions and study of international experience. MAU should try to apply non standard and innovative methods in the sphere of internationalization in order to promote the development of the sphere. Though activities are taken towards the improvement of foreign language proficiency at MAU, there is still need to enhance the level of proficiency of English language among the teaching staff and cadets as it will foster the reinforcement of external relations, study of foreign literature and enhancement of involvement of teaching staff and cadets in the processes of internationalization. There is also a necessity to involve the study of regional languages (Georgian, Turkish, Azerbaijani, Persian) in the academic programs.

The management system of the University has its peculiarities as MAU combines structure typical to university system and the requirements of a military unit. The Head of MAU has the authority to make decisions ad officio and those decisions are put into action through orders and are obligatory for all the staff of MAU. On the other hand the decisions can be discussed in the collegial management councils. As a military unit governance and administration of MAU is carried out based on defined policy and procedures, management bodies have their defined work-regulations that ensure the regularity of management system. The current management system of MAU aimed at the fulfillment of MAU mission and goals ensures regulated process of decision making. Respective departments of RA MoD participate in decision making process as external stakeholders. At the same representatives of teaching staff and cadets have passive participation in decision making procedures and it can hinder progress of the University and effectiveness of MAU activities.

MAU gets financial resources from RA MoD. The Expert panel finds it positive that there is a formulated mechanism for the allocation of financial means. Some expenses are envisaged in the annual budget which are directed to the fulfillment of MAU goals however the expenses are not

written in details according to strategic goals and academic programs which would have made the financial investments more purposeful. MAU does not have other financial inflows from education process, grant and other sources. The diversity of financial inflows will foster operative solution to financial problems and the formation of reserve fund.

The Expert panel finds it positive that the efforts of MAU are directed to the investment of internal QA system, its continuous improvement and formation of quality culture. During the last two years great work has been done for the creation of QA system which formed basis for later continuous development of the processes at MAU. It is praiseworthy that MAU provides necessary human and material resources for the management of QA activities. At the same time MAU management regularly supports implementation of QA activities, the staff members of the Department of QA and analysis participate in trainings organized by national and international organizations. All these promote development of QA structure and professional development of QA staff.

On the other hand conditioned by the peculiarities of military education there are some incompliance with QA requirements existing in RA education sphere (transparency, availability of information, active involvement of stakeholders in the activities, etc.).

**Strong points of the University are:**

1. Precise strategic goals and objectives of the University in line with RA MoD needs
2. Clear policy on MAU management and administration and bottom up system of accountability
3. Involvement of the opinion of external stakeholders of the academic programs
4. 100% employability of alumni due to MAU efforts
5. Clarity of military rules and their assurance by MAU
6. Teaching staff with high qualities and meeting the requirements of military education
7. Availability of necessary material-technical base for the implementation of academic programs
8. Operating mechanisms for the transfer of knowledge and values to society
9. Investment of QA system and involvement of specialists, high motivation of QA staff for the formation and development of quality culture.

**Weak points of the University are:**

1. Lack of autonomy
2. Lack of transparency of University activities among the wider range of public
3. Overloaded lecturers and lack of main lecturers for some courses
4. Lack of involvement of cadets in scientific-research activities
5. Lack of motivation of the officers for dealing with scientific-research activities parallel to education process
6. Lack of laboratory equipment for some professional courses
7. Low level of international cooperation
8. Lack of international mobility of cadets and teaching staff
9. Low level of proficiency of cadets in foreign languages

## **Main recommendations**

### **Mission and Goals**

1. To develop qualitative and quantitative indicators for monitoring the progress of implementation of strategic goals.
2. To ensure participation of internal stakeholders (cadets and teaching staff) in the development and implementation of strategic goals.

### **Governance and Administration**

3. To enhance the participation of teaching staff and cadet representatives in decision making processes in different governing bodies (Scientific Council, Faculty Council, etc.) in order to enhance the motivation of internal stakeholders and the effectiveness of their activities.
4. To initiate the activities for the creation of stable alternative financial mechanisms for the further development of MAU.
5. To conduct regular assessment of MAU external and internal risks with the participation of a wider range of internal and external stakeholders.

### **Academic Programs**

6. Reformulate the learning outcomes of academic programs and to increase the number of courses of narrow professional orientation and engineering.
7. To carry out special activities for cadets and teaching staff for the full application of newly introduced assessment system.
8. Conduct benchmarking of academic programs on module levels with the academic programs of other military education institutions in order to activate mobility of teaching staff and cadets.

### **Students**

9. In order to ensure high academic progress of the cadets to reallocate the workload of cadets and to increase the hours for self-preparation.

### **Teaching and Support Staffs**

10. Include clear requirements for professional and pedagogical competences of teaching staff in the academic program packages.
11. To develop mechanisms promoting recruitment of young teachers having scientific degree and to cooperate with civil universities.
12. To involve the hours of consultation and trainings provided by the teaching staff in their workload and to decrease the curricular workload of the teaching staff through decreasing non-professional workload.

### **Research and Development**

13. Evaluating the research potential of MAU staff with the support of RA MoD to develop and invest mechanisms promoting research activities of teaching staff and cadets.
14. To activate the involvement of cadets in innovative research activities in order to develop analytical skills and critical thinking of the cadets.



15. To find ways in order to establish Specialized Council awarding degrees in the military sphere.

#### **Infrastructure and Resources**

- 18 To replenish the resource base with modern laboratories and measuring techniques to ensure full implementation of practical part of academic programs. And to ensure high level physical training to replenish the sports hall with modern trainer equipment.
- 19 To ensure the enhancement of effectiveness of documentation management and availability to invest system of electronic documentation circulation.

#### **Social Responsibility**

20. To introduce MAU's own web-page in order to enhance the transparency of activities carried out at MAU and to increase the number of applicants.
21. To imply the requirement of applying qualitative analysis in all the reports developed at MAU.
22. Continuously to improve and develop feedback mechanisms and to regularly monitor the outcome.

#### **External relations and Internationalization**

23. To do needs assessment in the sphere of external relations and internationalization, to develop and introduce policy for the fulfillment of the goals of the sphere.
24. To invest mechanisms promoting involvement of cadets in the sphere of external relations and internationalization.
25. To enlarge and reinforce the opportunities for cadets and teaching staff to learn English.
26. To involve the study of regional languages (Azerbaijani, Georgian, Persian, Turkish) in the academic programs.

#### **Internal Quality Assurance System**

27. To make the process of self-evaluation of structural units continuous in order to keep the best practice.
28. To activate the involvement of internal stakeholders (teaching staff, cadets) in QA processes.
29. To involve representative of RA MoD responsible for the QA of military universities in MAU QA processes.

## PEER-REVIEW FROM THE PERSPECTIVE OF EDUCATION INSTITUTION'S INTEGRATION INTO EUROPEAN HIGHER EDUCATION AREA

### Findings

- The mission and goals are defined in the Charter of the University and are fully agreed upon with RA MoD. Internal stakeholders are administrative and teaching staffs and cadets. The external stakeholder is the customer: RA MoD and the public. The University has a 5-year development plan.
- There is a management system and competent departments at MAU. There are Scientific and Sergeant Councils. Regularly general meetings are organized during which meetings with all the stakeholders including cadets take place. The cooperation with RA MoD is regulated. There are limited opportunities for cadets and teaching staff to be involved in decision making procedures and to have impact on the formation of different documents and this is conditioned by the peculiarities of military service.
- The academic programs are formed according to the requirements of RA MoD and are directed towards the fulfillment of MAU mission and goals. The policy of the academic programs is directed to academic honesty.
- The policy of meeting the educational requirements of the cadets in structures based on the implementation of the requirements of RA MoD. The whole education process is based on the military and professional preparedness of the graduates and the elimination of negative feedback from military units. The educational process is also directed to the harmonic development of officer as an individual. The University cooperated with YSU and NPUA, a number of lessons are organized in the educational-material base of those universities. The protection of cadets' rights is based on the regulation of RA AF and on the requirements of the orders of RA Minister of Defence.
- The system of psychological and professional selection during the entrance exams is lacking at MAU. The admission is organized based on exam results, decision of medical committee and level of physical training. The participation of cadets in scientific-research activities is envisaged. However it is limited because of the lack of laboratory equipment and modern engineering techniques, the necessary number of calculating equipment is not ensured. The level of metrological preparedness of cadets of engineering professions is low. Besides, there is lack of financing for scientific-research works.
- There is full staff at MAU to organize the education process, there are also requirements for the qualifications of the teaching staff. Announcements about the vacancies are regularly put into Mass Media. Lecturers from YSU and NPUA also conduct lectures. The administrative and support staffs are capable of fulfilling strategic goals.
- There is one or maximum two candidates of technical sciences at the chairs. The methodical preparedness of the teaching staff does not allow developing high quality text books and educational manuals, that will be in line with the level of military university. There is a lack of modern equipment and digital educational-practical base.
- Based on the existing material base applied scientific-research works are conducted at MAU. Cadets are involved in different international Olympiads organized in military and civic universities.

- There is lack of material driver for the teaching staff to do scientific research works. The qualification of the teaching staff does not allow implementing theoretical scientific research that will be relevant for the category of a military university.
- There is necessary environment at the University which promotes the preparation of officers with relevant knowledge.
- The system of accountability is developed at MAU. There is also feedback from military units where the graduates carry out their military service. There are mechanisms for the analysis of opinion about the alumni and elimination of shortcomings.
- Internationalization is carries out within the boundaries of the opportunities which are set according to the requirements of RA MoD provisions and regulations of military units. There is a close cooperation with the embassies of different countries. The system of education of Russian and English languages is regulated.
- There is a system of internal quality assurance system at MAU. 3 years ago the Department of QA was established and it successfully operates. High quality specialists are selected. Internal QA system is regularly analyzed. The information is regularly provided to the external stakeholder: RA MoD. And the presentation to a wider public is limited according to RA MoD requirements.

### **Recommendations**

- As currently MAU has the status of a military aviation university it is necessary to develop a plan for the preparation of staff for the teaching staff to have necessary scientific degree and title and meet the requirements set for the teaching staff. As this process is long-lasting (not less than 5 years) it is necessary to recruit teaching staff members having scientific degree and titles also from other universities.
- It is necessary to ensure the equipment with modern educational laboratories and calculating base, trainers and experimental techniques.
- It is necessary to ensure higher level of social-psychological preparedness of alumni that will give them an opportunity to create the cooperation with soldiers during the first phase of military service on higher level requirements.
- It is necessary to improve the level of proficiency of Russian and English among the cadets.
- It is necessary to create opportunities at MAU to study also the languages of neighbours (Azerbaijani, Georgian, Persian, Turkish)

**27 July 2018**

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**Hermine Grigoryan**  
**Head of the Expert panel**

## DESCRIPTION OF EXPERTISE

### Composition of the expert panel

External evaluation of MAU self-evaluation and QA processes was carried out by the expert panel with the following composition<sup>1</sup>:

- **Hermine Grigoryan** –Vanadzor State University, Dean of Faculty of Physics & Mathematics, Candidate of Physical & Mathematical Sciences, Associate Professor
- **Alexandr Kryachko** – Head of Chair on Radio-technical and Optoelectronic Systems of Saint Petersburg State University of Aerospace Instrumentation, Doctor of Technical Sciences, Professor, RF accredited expert
- **Gegham Korayan** – Deputy Head of Institute of Information & Communication Technologies and Electronics on Educational Affairs, Candidate of Technical Sciences, Associate Professor at the Chair of Electronic Techniques
- **Avetis Gevorgyan** – Head of Department of Quality Assurance of Vocational Education of PARA, Candidate of Economical Sciences
- **Vigen Mkrtchyan** – 4<sup>th</sup> year student of Faculty of Radio Physics of Yerevan State University.

The works of the expert panel were coordinated by Varduhi Gyulazyan – Senior Specialist at ANQA Department of Institutional and Program Accreditation.

The translation was provided by Arpine Hakhverdyan- alumni of Armenian-Russian University.

The minutes of the meetings of the Expert panel were taken by Mary Barseghyan- 1<sup>st</sup> year MA student at the Chair on Education Management and Planning at YSULS.

The composition of the expert panel was agreed upon with the University.

All the members of the expert panel, including the Coordinator and the translator have signed independence and confidentiality agreements.

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<sup>1</sup>Appendix 1. CVs of expert panel members

## THE PROCESS OF EXPERTISE

### Application for state accreditation

The University applied for institutional accreditation by submitting the application form, the copies of the license and respective appendices to ANQA.

The ANQA Secretariat checked the correspondence of the application package with ANQA requirements.

According to the decision on accepting the application an agreement was signed between ANQA and RA MoD. The timetable of activities was prepared and approved.

According to the time-table the institution presented its self-evaluation report in Armenian according to ANQA format and the package of corresponding documents. The translation of the documents into English was organized by ANQA.

The self-evaluation of MAU was carried out by the group established for that particular purpose according to the order of the Head of MAU.

### **Preparatory phase**

ANQA coordinator conducted a technical review of the report against the ANQA requirements. The self-evaluation report was sent to the expert panel members for initial evaluation. The composition of the Expert panel was agreed upon with MAU beforehand.

In order to prepare for the activities and to ensure the effectiveness of the process the expert panel members were trained according to the following topics:

1. Accreditation process, peculiarities of expert panel work, ethics of an expert and rules of behaviour
2. Preliminary evaluation of the self-evaluation report through the examples got from practice
3. Site-visit through role-play
4. Preparation of expert panel report

Having examined the self-evaluation report of the University and the supporting documentation base the expert panel conducted preliminary evaluation. According to the format the list of additional required documents and the questions for clarification was formed mentioning the respective structural units and target groups.

In the scheduled period the expert panel summarized the results of the initial evaluation and the coordinator of the process together with the Head of the expert panel formed the time-schedule of site-visit<sup>2</sup>. Guided by the Accreditation Manual meetings of all the groups with the expert panel, close and open meetings, observation of documents, visits to different structural units of the University, etc. were involved in the time-schedule.

After the separation of main issues and documents for observations the Expert panel clarified the issues to be discussed during the meetings. During the regular meetings questions per standard were discussed and the package for the preliminary visit of the Expert panel was formed.

The package involved plan-schedule of meetings, issues for additional clarification per target groups and the list of additional documents which should be observed during the site-visit. Representatives of teaching staff and cadets to participate in the meetings were chosen from the list presented by MAU. The list of alumni was provided by RA MoD.

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<sup>2</sup>Appendix 2. Time-schedule of site-visit

### **MAU Self-evaluation**

According to the approved time-schedule in order to prepare for the conduction of self-evaluation form 20.11.2017 to 02.02.2018 ANQA staff members conducted workshops for MAU self-evaluation working group about ANQA formats and explanation of accreditation criteria.

On 23.02.2018 the University presented its self-evaluation report in Armenian and English and the supporting documentation according to ANQA format.

### **Preliminary visit**

The preliminary visit to MAU took place on May 25, 2018. During the preliminary visit time-schedule of the site-visit was agreed upon with the University, the list of additional documents for observations and the list of participants was presented to the University. Organizational, technical, informative issues as well as ethical norms and behaviour of the participants of the meetings were discussed and reciprocally agreed decisions were made. The rooms for focus groups and for the work of the Expert Panel were observed and the issues concerning the equipment of the rooms with technical means were clarified.

### **Site-Visit**

The site-visit took place from June 4 to June 7, 2018. According to the time-schedule there was a close meeting of Expert panel the aim of which was to discuss and agree upon the circle of expert panel evaluation, issues to be clarified during the site-visit, strong and weak points of the University per criterion, procedure of conduction of focus groups, clarify the further steps with international expert Alexandr Kryachko. The whole Expert panel, ANQA coordinator and translator participated in site –visit.

The site-visit launched and ended with the meeting with Head of MAU. All the meetings envisaged with the time-schedule were organized including the open meeting where the Head of the Department of QA and Analysis was present. During the site visit the Expert Panel observed documents<sup>3</sup> and resources<sup>4</sup> and had focus groups with different structural units of the University. The Expert panel went to “Arzni” airport to see the implementation of internship. The information got during the different meetings as well as the main results of the observation of documents and resources were summed up at the end of each day and during the close meeting. The Expert panel evaluation was carried out based on State Accreditation Criteria and Standards and ANQA procedures that envisage two-level scale for evaluation: **satisfactory and unsatisfactory**.

### **Expert panel report**

The members of the Expert Panel and ANQA coordinator prepared expert panel draft report. The international expert prepared his separate opinion on peer-review which was fully involved in the report. The draft report was presented to MAU on 27.07.2018.

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**Varduhi Gyulazyan**

**Signature of the Coordinator**

**27 July 2018**

<sup>3</sup> Appendix 3. List of Observed Documents

<sup>4</sup>Appendix 4. Resources Observed by the Expert Panel

## EVALUATION ACCORDING TO ACCREDITATION CRITERIA

### BRIEF INFORMATION ABOUT THE INSTITUTION

**History:** On 24 December 1992 according to RA Government decree N604 the republic aero-club and “Arzni” airport were transferred for supervision of RA MoD aimed at preparation of aviation specialists necessary for RA Armed Forces (AF). On 13 April 1993 according to RA MoD order N0127 based on the republic aero-club and “Arzni” airport the RA MoD Educational-aviation Center was established which became the first military education institution of RA MoD.

On September 1993 the first admission of cadets was organized in aviation- technical professions. Mediated by RA MoD, according to RA Government decree N477 as of 20 September 1994 the educational aviation center obtained the status of military education holding the name of “Military Aviation-technical College of Yerevan”.

On 17 March 1995 the college was moved from “Arzni” airport to Yerevan, 89 Arshakunyats street. Taking into consideration the level of preparedness of the college as well as current requirements set to officer-specialists, based on RA Government decree N352 as of 26.04.2001 Military Aviation-technical College of Yerevan was restructured into higher education institution “RA MoD Military Aviation Institute” providing full -time 4 year education.

In order to give opportunities to get higher education in engineering to previous graduates of the collage correspondence education for 3 years was also organized. Taking into consideration the existence of educational-methodical base and the level of teachers’ preparedness in engineering, the Institute was assigned to organize the preparation of officers-signal specialists of RA AF as well. On 22 November 2004 according to RA MoD order N0177 the Signal Faculty was established, on 4 February 2005 according to RA MoD N021 the Faculty of Anti-aircraft Defence was established. In 2005 in honor of the 60 year anniversary of the victory of Great Patriotic War according to RA MoD order N351 the Institute was renamed after Armenak Khanpertyants and according to the same order it was assigned to give the Institute a battle flag.

In 2004 the Institute adopted the faculty principle of organizing the educational process. 3 professional faculties and 1 faculty of general education subjects were established. On 28 April 2016 according to RA Government decree N 424U, and to RA MoD order 1838 as of 04.08.2016 the Institute was restructured into University and became RA MoD Military Aviation University after Marshal Armenak Khanpertyants. In 2016-2017 academic year professions out of moved to a 5-year course of study. In 2017-2018 academic year in order to organize courses for the enhancement of qualification of officers’ staff according to RA MoD order N0238 as of 24.09.2016 the Center for Military-professional education was established. In 2017-2018 academic year the University introduced new profession “Exploitation and Application of Unmanned Aerial Vehicles”.

**Education:** The main strategic goal of the University is to deliver educational services, to develop and implement military-educational and scientific programs in order to meet the needs of RA AF. Hence the University strives to “Ensure transfer of knowledge, development of skills and competences in the sphere of application, planning, organization and management of Armed Forces within the military education system in line with RA NQF, State Educational Standards and based on national educational experience and international tendencies in the sphere of military education”.

In the strategic plan defining “formation and development of quality staff, assurance of effective service and working environment” (strategic goal 3) the University strives to create teaching

and support staffs meeting the requirements of academic programs and fostering the development of chairs. In order to fulfill that goal there is an objective: to improve the mechanisms of planning and recruitment of the staff, to clarify the requirements presented to the teaching staff, to conduct regular trainings and attestation for teaching and other staff according to the defined regulation, to ensure clear implementation of rights and obligations of the staff.

**Research:** Having the strategic goal “development of scientific-research potential according to the professions at MAU, enhancement of effectiveness of research” MAU puts forward the following objectives: to activate scientific-research activities of the University, organization of conferences and seminars with the involvement of cadets, ensure the integration of the results of scientific-research activities in education process, establish cooperation with other organizations in the research sphere (MAU strategic goals 2.1-2.3). The scientific research works of MA having practical importance are directed to the improvement of armament and military technique of RA MoD.

**Internationalization:** One of the strategic goals of MAU is enlargement of cooperation with foreign military education institutions, study and adaptation of international practice, enlargement of integration into RA higher education system (Strategic goal 7). In this respect the activities concerning study of best international practices, its adaptation and investment are highlighted. At the same time it is important to expand the cooperation with foreign military education institutions according to the plans of RA MoD for the exchange of experience (strategic objective 7.1) as well as to expand the cooperation with local higher and military education institutions (strategic objective 7.3).

**Quality Assurance:** One of the strategic goals of the University is: “investment of grounds for general quality management at the University” (Appendix 1.4, strategic goal 9). The University develops its QA policy based on ENQA standards and guidelines. The aim of the policy is to “invest official QA system that will give an opportunity to implement QA and improvement processes, to regulate and manage QA processes at MAU in line with University’s mission and strategic goals”.

While conducting the evaluation, the expert panel has been led by the principle of “correspondence to the goals” and has considered the above mentioned information as main ambitions and goals of the University.

## I. MISSION AND GOALS

**CRITERION:** The policies and procedures of the institution are in accordance with the institution’s mission which is in line with ANQF.

### FACTS

**1.1 The institution has a clear, well-articulated mission that represents the institution’s purposes and goals and is in accordance with National Qualifications Framework (hereafter NQF).**

The mission of MAU is formulated in 2017-2020 strategic plan. According to the mission MAU carries out higher military professional education with bachelor and additional academic programs based on the national educational experience and international tendencies in the sphere of military education and directs its activities towards the preparation and retraining of specialists with the qualifications of higher military aviation, communication and air defence in order to meet the



educational and military needs of RA Armed Forces. In general the mission of MAU is in line with RA NQF.

The main aim of MAU is to deliver educational services, to develop and implement military-educational and scientific programs in order to meet the needs of RA AF. Based on this mission the main 8 objectives of MAU are formulated. The expert analysis showed that the defined goals and objectives reflect the main processes implemented at MAU.

The general strategic planning and main directions of development of MAU were developed by RA MoD derived from the needs of RA AF. The main goals and objectives and directions of activities of MAU are derived from the development plans of RA AR, RA concept of military education and other legal acts of the sphere. The development of the strategic plan was carried out in line with RA AF 2016-2020 development plan with the parts concerning military education and MAU.

Annual working plan is developed for the implementation of strategic plan where the steps for the organization of the plan, time-schedule, responsible people and expected outcomes are mentioned. There are also indicators for assessing the progress of each strategic goal.

**1.2. The mission statement reflects the needs of the internal and external stakeholders.**

As MAU is a higher education institution under the supervision of RA MoD the main customer and its main stakeholders are RA AF General Staff and interested departments of RA MoD. Thus the mission, goals and objectives of the University firstly reflect the needs and requirements of RA AF.

The needs of internal stakeholders are revealed through regular surveys, meetings, planned meetings of commander staff, during the sessions of faculties and chairs. The results of discussions were later summarized by MUA Department of QA and Analysis and were involved in MAU strategic plan.

**1.3. The institution has set mechanisms and procedures to evaluate the achievement of its mission and goals and further improve them.**

The main mechanism for the evaluation of results of implementation of MAU mission and goals is the accountability of internal and external stakeholders. Accountability operates according to supervision- bottom-up (lecturer-head of chair-head of faculty) till the Head of the University and Deputy Minister of Defence of RA. [REDACTED]

[REDACTED]

Checking carried out at MAU by different committees of RA MoD are also mechanisms evaluating the activities of MAU. The results of checking are summarized and respective plans for improvement are developed.

One of the most important mechanisms of evaluation of goals is the inspection every 5 years by General Military Inspection (GMI) attached to RA President. Based on the inspection result summarization by GMI a plan for the elimination of shortcomings is formed where each structural unit is obliged to improve the issues mentioned by the GMI Committee.

There are indicators for the evaluation of the results of implementation of strategic goals. However there are no planned values for those indicators and the progress is not analyzed yet.

### ***JUDGEMENTS.***

The Expert panel positively evaluates the fact that MAU has a clearly defined mission which expresses main activities of MAU. It is praiseworthy that MAU activities and policy are in line with the mission and this fosters effective implementation of MAU objectives. Strategic goals and objectives as well as strategic planning is carried out based on RA MoD and RA AF needs at the same time feedback of internal stakeholders is also taken into account. These processes foster effective implementation of MAU strategic management and participation of external stakeholders in strategic management.

It is praiseworthy that there are a number of mechanisms (different reports, inspections by GMI and different departments of RA MoD) where directions towards the improvement of different processes of MAU are clearly mentioned and they foster continuous development of processes carried out at MAU.

Though there are indicators for the evaluation of strategic goals of MAU these indicators do not have qualitative and quantitative justifications which will put the monitoring and evaluation of the implementation of strategic goals at a risk.

**CONCLUSION.** Taking into account that MAU activities are in line with the University mission which corresponds to RA NQF, MAU goals and objectives reflect needs of internal and external stakeholders, there are a number of mechanisms for the evaluation of MAU activities and as a result of this evaluation problems are revealed and activities are improved the Expert Panel finds that the University meets the requirements of Criterion 1.

***The compliance of the institution's institutional capacities with the requirements of criterion 1 is satisfactory.***

## **II. GOVERNANCE AND ADMINISTRATION**

***CRITERION:*** The institution's system of governance, administrative structures and their activities are efficient and are aimed at the accomplishment of mission and goals of the institution preserving ethical norms of governance.

### **FACTS**

**2.1 The Institution's system of governance ensures structured decision-making process, in accordance with defined ethical rules and has efficient provision of human, material and financial resources to accomplish its educational and other purposes.**

According to MAU Charter approved by RA MoD order N 838 as of 04.08.2016 MAU is a state organization not having the status of a legal entity. MAU combines the structures typical to an education institution and military unit.

The strategic goal 6 of MAU 2017-2020 strategic plan defines: “Improvement of management system of the University in line with mission and strategic goals”.

According to MAU Charter “the management of the University is carried out by RA MoD, University Council, University Scientific Council and Head of the University”. University Council is the supreme management body. MAU Scientific Council is a collegial management body (the latest regulation of the Scientific Council was approved in 17.10.2017). The Scientific Council deals with the issues concerning the organization of educational-methodical and scientific-research activities, planning and management of the University. Besides the administrative staff teaching staff and cadets are also involved in the composition of Scientific Council. The governance of the University is carried out by the Head of MAU. The appointment of the Head and firing him is carried out by RA President.

Besides the Standing Committee for Qualification there are also other committees carrying out internal checking (checking of accounting and financial reports, main assets, inventarization of items, armament of military unit, military technique, committee for checking weapons and ammunition, Committee for the discussion of suggestions, applications and appeals presented by the staff of MAU, Standing Committee for ensuring security of military service at the military unit, etc.). The results of checking are presented to MoD in the format of reports. MoD controls the usage and maintenance of equipment attached to MAU as well as approves annual estimate of expenses of MAU.

According to the order N947-У of RA Minister of Defence as of 11.09.2012 there is a court of honor of officer at MAU which aims at fostering the strict and accurate implementation of RA Constitution, laws and requirements of other legal acts as well as orders of commanders (heads) and rules of officer’s honor, formation of attitude towards violation of disciplinary rules, laws and legal acts by the officers.

There is a Sergeant Council in the University which deals with the discussion of issues concerning military discipline and education process. Ethical rules of management system are defined in RA AF Internal Service Code and by RA AF Disciplinary Code. Decision making procedure at MAU is carried out according to vertical principle typical to a military structure.

There are necessary human resources for the implementation of educational and other goals. On the other hand there are limitations in terms of implementation of financial and material policy of management processes conditioned by strict control of RA MoD.

**2.2 The institution’s system of governance gives an opportunity to students and the teaching staff to take part in decision making procedures related to them.**

Decision making process at MAU is carried out the way typical to a military unit- from junior commander staff up to the higher one according to hierarchy.

Up to 2017 representatives of teaching staff and cadets were not involved in Scientific Council but realizing the importance of involvement of internal stakeholders in the Scientific Council MAU made changes in the regulation of Scientific Council. Currently cadets and teaching staff representatives can take part in the sessions of the Scientific Council in cases when issues relating to cadets and teaching staff are discussed. On the other hand there are also the following mechanisms for the participation of teaching staff and cadets in decision making processes:

- Raising the suggestions and issues during morning and evening checkings of the staff according to the written applications,

- During faculty and chairs sessions (for the teaching staff)
- During the meetings of officer staff, planned and other meetings with higher commander staff upon necessity (for the officer staff)
- Through Sergeant Council (for cadets and listeners)

During the site-visit it turned out that some problems (operation of canteen, appeal of marks, etc. issues concerning increase of self-preparation hours, freeing everyone regardless of academic progress etc. were not given solution to) raised by the cadets were given solution to through these mechanisms. A number of issues raised by the teaching staff have not been solved yet (exception from classes after night shift, lack of modern techniques, absence of the package of programs of modern computer technologies for the course on “Engineering graphics”).

### **2.3 The institution formulates and carries out short-term, mid-term and long-term planning consistent with its mission and goals as well as has appropriate mechanisms for the implementation and monitoring of those plans.**

Derived from 2016-2020 development plan of RA AF approved from RA President MAU has developed its 2017-2020 strategic plan which is in line with its mission and goals. Annual plan/time-schedule of activities for the University is developed on the basis of activity plans/time-schedules of RA AF 2016-2020 development plan.

Each structural unit of MAU develops its annual working plan according to the defined format where the deadlines and responsible people of the activities are mentioned. Based on the annual plans different structural units develop their short-term (monthly) plans. They are approved according to hierarchy by the supervisors. The implementation of plans is summarized in the reports which are sometimes registration of facts rather than analysis.

Monitoring and evaluation of the implementation of plans is carried out through planned and sudden checking according to hierarchy up to the Head of MAU. Checking of different structural units can be carried out by respective departments of RA MoD and by GMI. Monthly and quarterly developed reports on the implementation of MAU plans which are considered as mechanism of monitoring of MAU mission and goals are regularly presented to MoD.

### **2.4 The institution conducts the study of factors influencing its activities and draws on reliable findings during the decision-making process.**

Study of the external factors influencing MAU activities is carried out by RA MoD. Based on the conducted analysis necessary recommendations are given to the University. For instance based on the results of those analyses the preparation of specialists with the profession of “Exploitation and Application of Unmanned Aerial Vehicles” was launched. Besides, a number of professions passed from a 4 year education to a 5-year one.

Study of internal factors is carried out through regular checking and monitoring in terms of both military service and education-scientific activities. Particularly, analysis was made by the Department of Quality Assurance and Analysis about the results of admission and final examination, surveys carried out with cadets and teaching staff, analysis of class observations as well as analysis was made by faculties and Educational-methodical Department about the progress of cadets. In particular, as a result of surveys the canteen was improved, the objectiveness of the assessment by the teaching staff was enhanced, etc.

**2.5 The management of the policies and procedures is carried out based on the quality management principle (plan-do-check-act /PDCA/).**

On the basis of MAU quality assurance (QA) policy 2017 the University adopted the principle of PDCA cycle (plan-do-check-act). Particularly with the application of this principle as a result of surveys, analysis and meetings with international organizations the infrastructure of MAU was improved, the charter, mission and goals of the University were clarified. According to the report on “Results of cooperation in 2016, definition of issues for 2017” activities are carried out at MAU towards the reinforcement of the principles of Bologna process in military education system.

Evaluation of the activities of the University is carried out through analyses and reports. Effectiveness of the activities of MAU, its progress and success as well as revealed shortcomings are evaluated. The results are presented to both internal staff of the University and to RA MoD. Respective changes are made in the working plan for the next year for the elimination of shortcomings and improvement of the activities.

**2.6 . The institution has evaluation mechanisms in place ensuring data collection, analyses and application of the data on the effectiveness of the academic programs and other processes.**

There are mechanisms for gathering information and making analysis about the effectiveness of current academic programs of MAU and other processes but there are no evaluation mechanisms as the academic programs have been newly developed. Particularly those programs were developed in 2017 based on the guide-format developed by MAU Department of Quality Assurance and Analysis. IN the 3 academic programs presented by MAU there is a separate section on Monitoring of academic programs which involves current, annual and long-term monitoring phases each one with the description of its actions. However taking into account the fact that academic programs are new there are no monitoring results in this format. Before that the evaluation of the academic programs was carried out through regular analysis based on the qualitative and quantitative data provided by the faculties and Educational-methodical department.

According to the self-evaluation of MAU evaluation of education process is also carried out by the Department of Quality Assurance and Analysis through the application of a number of mechanisms (class observations, analysis of academic progress of cadets, reports of the Presidents of final attestation committee, etc.).

Information about the evaluation of other processes (health, material technical assurance, financial, staff recruitment, scientific-experimental, etc.) is gathered according to the formats set by RA MoD. The further application of results is reflected in the tasks given based on them.

**2.7 There are objective mechanisms in place evaluating the quality of quantitative and qualitative information on the academic programs and qualification awarded.**

Derived from the military direction of the University not all the information is available to a larger scope of stakeholders. On the other hand the 6<sup>th</sup> principle put on the basis of QA Policy of MAU approved on 15.09.2017 defined: “Publicity. Ensures the availability of information about internal QA of MAU among the stakeholders”.

General reports and analyses about the qualitative and quantitative evaluation of academic programs and awarded qualifications are sent to RA MoD. Information about MAU for a larger scope

of stakeholders is regularly published through TV, promotional newsletters, [www.mil.am](http://www.mil.am), during the visits to schools. However there are no mechanisms evaluating the publication of qualitative and quantitative information about the academic programs and qualifications awarded.

### ***JUDGEMENTS.***

As a military organization management and administration of MAU is carried out through defined policy and procedures, management bodies are operating based on defined work regulations which ensure the control of management system. The Expert panel states that there are necessary human and limited material and financial resources at MAU for the implementation of academic programs and other processes.

The Expert panel finds it positive that ethical rules of the management system are defined based on RA AF Internal Service Code and by RA AF Disciplinary Code. The Service Code defines “general rights and obligations of military servants of RA AF, their relationships, obligations of the main officials of different structural units as well as their internal discipline”.

The current management system which is aimed at the fulfillment of MAU mission and goals ensures the systematic process of decision making. Respective departments of MoD take part in decision making processes as external stakeholders. At the same time teaching staff and cadets have passive participation in decision making processes related to them which can hinder progress and effectiveness of MAU.

There are short-term, mid-term and long-term plans in MAU and as a monitoring mechanism for all the levels the mechanisms of reports are defined. The existence of the mentioned plans makes the works of management system more purposeful.

The Expert panel finds it positive that MAU carries out study of external factors influencing its activities, particularly by RA MoD and GMI ensuring the exposure of current problems and their solutions as well as fostering the continuous improvement of MAU education process.

The active involvement of external stakeholders in management process fosters precise planning of the activities of MAU management system and the fulfillment of strategic goals.

On the other hand the financial policy conditioned by the strict control of RA MoD does not allow making long-term financial planning which can hinder the progress of the University.

The gathering of information about the effectiveness of MAU academic programs and making analysis can give an opportunity to improve academic programs and foster the application and exploitation of military technique of RA AF and prepare specialists meeting the requirements of exploitation the modern technique.

**CONCLUSION.** Taking into consideration that MAU management system ensures regulated process of decision making, has necessary resources for the fulfillment of educational goals, external stakeholders are actively involved in management process of the University, there are short-term, mid-term and long-term plans and mechanisms for their implementation and monitoring the Expert panel finds that MAU management system and administrative structures are aimed at the fulfillment of mission and goals of the University preserving the ethical norms.

***The compliance of the institution's institutional capacities with the requirements of criterion 2 is satisfactory.***

### III. ACADEMIC PROGRAMS

***CRITERION: The academic programs are in concord with the Institution's mission, form part of institutional planning and promote mobility and internationalization.***

#### FACTS

**3.1 The academic programs are in line with Institution's mission, they correspond to the state education standards and are thoroughly described according to the intended learning outcomes of the qualification awarded.**

In the four faculties of the University 13 academic programs are implemented and the profession of "Exploitation and Application of Unmanned Aerial Vehicles" was first invested in this academic year.

European Credit and Transfer system (ECTS) has been introduced in MAU since 2013. Since 2013-2014 academic year all the academic programs at MAU transferred to ECTS system. MAU academic program descriptions were developed based on the guideline-format elaborated by the Department of QA and Analysis.

As a result of the analysis by the Expert panel and the meetings with the stakeholders it became clear that the academic programs of MAU are in line with the mission of the University as MAU prepares specialists who meet the military and educational requirements of RA MoD.

As it was revealed in the expert panel analysis the LOs of the academic programs are in compliance with the BA level of NQF and with state education standards for the profession having the requirements of the professional sphere as the basis. MAU plans to make compliance also with Dublin Descriptors or with the criteria developed for engineering academic programs defined by the American Accreditation Board of Engineering and Technologies (ABET).

During the development of the academic programs while forming LOs MAU mission was also taken into consideration also paying attention to general military competences. At the same time the analysis of the Expert panel and the meetings with stakeholders showed that there are few professional courses on narrow block of engineering.

**3.2 The Institution has a policy for the selection of teaching and learning methods in line with intended learning outcomes of academic programs and it promotes student-centered learning.**

In MAU academic program descriptions the policy on the selection of teaching and learning approaches and methods is described. There are a number of teaching and learning methods which are selected according to the outcomes of the academic programs.

The effectiveness of teaching and learning methods is evaluated through studies and class observation by the chairs and Educational-methodical Department as well as through the surveys conducted by the Department of QA and Analysis.

During the meeting with the stakeholders it became clear that there are separate cases when the methodology of teaching was improves by the lecturers based on the opinions of the cadets.

In 2016 survey was conducted among the cadets about the teaching methods applied at the University. In the analysis it was mentioned that 95% of the cadets who participated in the survey are fully satisfied with teaching methods applied at the University that give an opportunity to

comprehend the courses. On the other hand 94% of lecturers mention that they apply modern methods in order to actively involve the cadets in lessons.

After the meeting with the stakeholders it became clear that MAU applies the approach of learning based on tasks as this method helps the cadets to develop skills of quick orientation and decision making.

During the practical lessons posters and stands are applied that show the structure of armament and military technique, functional outlines as well as nature and regulation of activities of military units and their commanders.

MAU plans to upgrade the applied stands and they have already turned to MoD with this issue.

There is a strict requirement at MAU to be ready for the lessons each day. The cadets who raised the question of enhancing the hours for self-preparation also mentioned about this.

### **3.3 The Institution has policy on students' assessment according to the learning outcomes and promotes academic honesty.**

The regulation on rating system of assessment of knowledge, skills and competences of cadets is operated at MAU and the multi-component assessment system is described there. The procedure on the appeal of assessment system is also involved in the regulation. There are also provisions on academic honesty and prevention of plagiarism in the regulation.

Assessment policy is also presented in the academic program descriptions and they comprise the following sub-sections: the role, goals and objectives of assessment, main methods of assessment, principles and methodology of assessment policy, assessment scale.

Assessment criteria are presented in each academic program and with a separate table the academic program LOs and methods of assessing their alignment is mentioned.

In spite of these reforms, during the meeting with cadets and teaching staff it became clear that the difficulties of full comprehension of new multi-component assessment system by cadets and teaching staff have not been overcome yet.

It should also be mentioned that derived from the peculiarities of the University as a military unit the discipline is also involved in the mark of a cadet and as a result the cadets with higher progression results are given the opportunity of being set free.

The final stage of the academic program is final attestation (final exams 18 credit) the aim of which is to check theoretical and practical knowledge, skills and competences according to the academic program learning outcomes.

Internships at MAU are carrying out starting from the first year of study to the final and their assessment is an important factor for the cadet in the general rating system.

The components of the assessment of internship involve regular attendance to internship, implementation of practical tasks, formation and submission of reports.

For the effective evaluation of assessment system surveys are conducted by the Department of QA and Analysis among the cadets and teaching staff. According to the results of surveys and the meetings with the Expert panel the applied assessment methods foster progress of cadets.

### **3.4 The academic programs of the Institution are contextually coherent with other relevant programs and promote mobility of students and staff as well as internationalization.**



The consistency of the structure and content of the academic programs (courses, LOs, teaching and learning methods) is ensured with similar programs of leading military education institutions of RF as the main technique studied at MAU is produced in RF. Two representatives of MAU participated in study visit within DEEP project in University of National Defence of Czech Republic according to the cooperation plan of RA MoD. In the action plan of this cooperation courses with military direction are mentioned, their descriptions and competences. As a result of the observation of that plan and MAU academic programs by the Expert Panel it became clear that military courses and competences of current academic programs are in line with the mentioned plan.

Derived from the military nature the University does not have agreements promoting exchange and mobility of students with Universities of other countries. RA MoD has the authority to sign such agreements and to assign such tasks to MAU. In terms of MAU staff the mobility is only their participation in trainings at leading foreign military education institutions and in courses for the enhancement of qualification.

### **3.5 The Institution has policies in place ensuring academic program monitoring, evaluation of effectiveness and improvement.**

Monitoring and evaluation of the academic programs at MAU are carried out according to the procedure on academic program monitoring with current, annual and long-term phases. As a result of checking some changes have already been made directed towards the improvement of the education process (introduction of new courses, enhancement of practical hours, improvement of course descriptions, etc.).

External monitoring of the academic programs are carried out by RA AF General Staff, RA MoD Departments of Personnel and Military Education, Aviation, Anti-aircraft Defence, Signal and Automatic Management Systems. Regular checking and monitoring of the quality of the academic programs and prepared specialists are carried out by those departments.

External monitoring and evaluation of the University is carried out by GMI which every 5 years carried out comprehensive evaluation of the University activities both as a military unit and as an education institution including academic programs, level of work abilities of main and changing staff of the University according to the defined criteria. Based on the revealed problems a plan for improvement is developed and the University is guided by that plan for the next 5 years.

Within the framework of cooperation of RA MoD and OSCE Yerevan office in 2015 external monitoring of the academic programs on humanities at MAU (at that time MAI) was carried out and as a result the suggestions were given to the University for the improvement of the academic programs. The suggestions were taken into account by the University during further development of curricula.

### ***JUDGEMENTS.***

As a result of the examination of the academic programs the Expert panel came to a conclusion that they are mainly in line with the University mission, state educational standards and NQF. The academic programs are agreed upon with the main customers- respective departments of RA MoD which gives the opportunity to ensure employability of all the alumni. It is important that since 2017-2018 the new profession on “Exploitation and Application of Unmanned Aerial Vehicles” was introduced derived from the needs of public and RA MoD. This gives an opportunity to prepare

specialists meeting the needs of the labor market of the sphere. At the same time the Expert panel is concerned that the lack of subjects of narrow professional and engineering block can put the development of necessary competences in danger.

It is positive that MAU has adopted teaching based on tasks which fosters enhancement of practical skills and responsibility.

The Expert panel finds it positive that the University has an improved multi-component system of assessment of cadets according to clearly defined criteria however it should be mentioned that the investment of this system is still in the initial phase and it is admitted by the teaching staff with difficulty which can later on endanger the assessment of internship and final examinations as well as award of qualifications.

Mainly external stakeholders take part in monitoring and evaluation of the effectiveness of academic programs. However it should be mentioned that the involvement of cadets in the revision of academic programs is weak and this hinders full participation of cadets in the organization of education process.

It should be mentioned that the University does not have the opportunity of compatibility with similar military academic programs and there is still much to do in terms of eliminating the limitations of mobility of cadets and teaching staff

**CONCLUSION:** taking into consideration that the academic programs of the University are in line with the University mission, state educational standards, and are formulated in compliance with QNF, teaching and learning methods are selected according to LOs, there is a mapping of the academic programs, the University has a multi-component assessment system that fosters progress of cadets, RA MoD as the main customer is involved in monitoring and improvement processes of the academic programs the Expert panel finds that MAU meets the requirements of Criterion 3.

***The compliance of the institution's institutional capacities with the requirements of criterion 3 is satisfactory.***

#### IV. STUDENTS

**CRITERION:** *The Institution provides support services to students ensuring productive learning environment.*

##### FACTS

**4.1 The Institution has set mechanisms for promoting students' recruitment, selection and admission procedures.**

There are a number of mechanisms at MAU for the recruitment and selection of students. Particularly, upon the mutual agreement of RA MoD and MoES each year groups are established according to RA Minister of Defence and those groups together with representatives of military commissariats visit schools and other education institutions. The aim of those visits is to carry out professional orientation as well as to present the peculiarities of military university, RA AF issues, historical traditions of RA Army, etc. During the meetings with students it became clear that many of the current cadets became aware of MAU during such meetings.

Study visits and meetings with MAU staff are also organized for the applicants which is an opportunity to learn about the issues that applicants are interested in on the spot.

Opportunities provided by Mass media are also used: TV and radio programs, expos, journals, newspapers. There is also information about the admission procedure of MAU in a section in the official web-site of MAU. During the meeting with cadets it became clear that some of them became aware of the admission procedure from the RA MoD web-site. During the meetings with stakeholders it was clear that in the newspaper “Hay Zinvor” there is information about the regulation on admission as well as the details of the procedure are presented during the TV program “Zinuj”.

Analysis on the effectiveness of the recruitment mechanisms of applicants is not carried out yet. Female representatives also have the opportunity of applying to MAU Department of Anti-aircraft Defence and Signal. During the meetings it became clear that the number of female representatives have increased recently. There is also admission for one-year courses on the basis of higher education, the decision is made by RA MoD Mandate Commission. An individual interview with the applicant is organized. After the end of the course the cadets get initial officers rank of Lieutenant and an agreement for military service for maximum 3 years is signed.

Cadets are dismissed from MAU because of insufficient academic progress, low discipline, refusal to study, illness, and in case of pilot professions- because of incompliance for flight, impossibility to continue education or because of refusing to sign agreements for studying at MAU and for later military service.

#### **4.2 The Institution has policies and procedures for evaluating student educational needs.**

Commander staff of platoons, teaching staff of faculties and the staff of Educational Methodical Department are all involved in needs assessment of cadets as they regularly have meetings and discussions with cadets.

The quality of commander staff, teaching methods of lecturers and the learning environment was evaluated by the cadets for needs assessment. There is a Sergeant Council at MAU as well as Curators who support cadets in the issues raised by them. The cadets can get sport from Curators concerning educational issues and for the issues who are not related to education the cadets turn to the commander of the respective platoon according to hierarchy.

The cadets mentioned that there are cases when they have problem and they turn to the lecturer first. For instance there was a problem concerning their workload and the cadets turned to the Curators for the organization of additional practical lessons. Based on the feedback of cadets changes were made in teaching and assessment methods. During the meeting with cadets it became clear that they have the opportunity to turn to the lecturers, heads of chairs every time for the discussion of issues concerning education.

There is a “Quick feedback box” and “trust phone” in the main building of MAU and the cadets can immediately address their issues to RA Minister of Defence. The “Quick feedback box” is opened by a representative of RA MoD

#### **4.3 The Institution provides opportunities for extra-curricular activities and advising services aimed at supporting students’ effective learning.**

MAU provides opportunities to the cadets for additional trainings. Every day cadets are given self-preparation hours according to the set schedule. The system of academic adviser also operates at MAU. The head of the cadet group controls effective organization and implementation of educational

activities directed to the enhancement of academic progress, military discipline and reinforcement of moral-psychological situation of the staff.

According to the order of the Head of MAU the chairs organize group and individual consultancy for the cadets having lower academic progress for the current semester. The cadets who need additional explanation for some courses conditioned by the absence from that particular lesson or having unclear questions can participate in the individual consultancy. Upon necessity the chairs organize additional lessons for the academic groups.

During the meeting with cadets it became clear that whenever the cadets have problems concerning preparation for exams, individual tasks they get additional consultancy from their lecturers.

#### **4.4 There are precise regulation and schedule set for students to turn to the administrative staff for additional support and guidance.**

The cadets turn to the administrative staff according to the hierarchy principle: commander of platoon, troop, battalion, Head of the faculty, Deputy Heads of MAU and upon necessity to the Head of MAU. The cadet writes an application to the commander of the platoon and then the application reaches respective heads of administrative staff, necessary decision is made, a guidance is given or support is provided. In case of urgent issues the cadets can turn to the Head of the Faculty through the commander of the troop (according to RA AF internal military regulation).

#### **4.5 The Institution has student career support services.**

An agreement about the military service is signed with cadets admitted to MAU. After the graduation according to the order of the Minister of Defence all the graduates are awarded with "Lieutenant" military rank and they start their service in RA AF respective departments.

The cadets who show excellent results during the study are given the opportunity to continue their education in RF or in military education institutions of other foreign countries. Particularly, MAU graduates with excellent graduation results continued their education in the military academies of Italy and France.

In order to enhance the professional and educational level of RA AF officers staff of different departments and to foster their promotion MAU has the Center for the enhancement of qualifications and for professional military education which organizes courses.

#### **4.6 The Institution promotes student involvement in its research activities.**

The cadets write papers which promotes development of their analytical, critical and quick orientation skills. The cadets carry out research activities with the guidance of supervisors, make reports in cadets scientific councils which are later on published.

MAU organizes conferences where cadets are also involved. During the conferences the cadets have the opportunity to present the results of their research together with their lecturers.

Some cadets upon the supervision of MAU teaching staff participated in international competitions organized jointly with UNESCO and "Airbus" company.

However scientific-research projects with the participation of MAU cadets have not been implemented so far.

#### **4.7 The Institution has a special body, which is responsible for the protection of students' rights.**

Rights and obligations of MAU students are stipulated in RA Law on Education and RA Law on Higher and Postgraduate Education and in RA AF Regulatory books. One of the bodies dealing with protection of rights of MAU cadets is Sergeant Council whose Charter is approved by order N435 of RA Minister of Defence as of 20.06.2003. According to that Charter the issues of the Sergeant Council are to protect rights of senior commanders, to proceed with practical initiatives, to participate in the preservation of internal discipline of MAU, to keep in the center of attention social issues of cadets and sergeants support the organization of cadets' rest and pastime.

During each issue discussed at the sessions of Sergeant Council the member of the Council can express his/her opinion, make suggestions, present written appeal to the President of Sergeant Council and upon necessity to the commander. Meetings of Sergeant Council are organized every month. For the protection of their rights the cadets can get support from Sergeant Council and can raise their issues. There are cases when the issue was raised and later on a solution was given. The Sergeant Council deals with issues concerning education, physical training, e.g. there were cases when cadets with lower academic progress were attached to the ones with higher academic progress in order to get support. Additional trainings were organized for making the physical training better. Issues concerning the academic workload were also discussed in Sergeant Council. There is also a lawyer at MAU to whom the cadets can turn to.

#### **4.8 The Institution has set mechanisms for evaluating and ensuring the quality of educational, consultancy and other services provided to students.**

Evaluation and quality assurance of educational, consultancy and other support services provided to cadets at MAU is implemented through survey conducted among the cadets for the evaluation of effectiveness of education process which is carried out by Department of QA and analysis. The surveys concern daily workload of cadets, teaching methods, resources, literature, internship, etc. According to the survey analysis the cadets are mainly satisfied with the services provided. There are some issues concerning the enhancement of the level of proficiency in a foreign language and MAU tries to find solutions through the organization of different additional courses and cooperation with US Embassy in Armenia. The cadets also expressed their complaint about the scarcity of internship and as a result the number of laboratory practices was increased.

#### ***JUDGEMENTS.***

The Expert panel positively evaluates the fact that there are clear mechanisms for recruitment, selection and admission of cadets at MAU and those mechanisms foster transparent and effective implementation of admission and the availability of admission requirements for the public.

It is praiseworthy that there is a policy on needs assessment of cadets, since 2017 surveys have been organized, there are "Quick feedback box" and "trust phone" through which cadets can address their issues to RA Minister of defence. These mechanisms foster needs assessment of cadets and solutions of those problems. The existence of Sergeant Council and disclosure of issues also foster protection of cadets' rights. The Expert panel is positive about the fact that there is an institute of Curators/Advisers at MAU to guide, support and provide consultancy to cadets, there is a system of self-preparation of cadets, there are opportunities for additional lessons. The cadets also have the opportunity to turn to the administrative staff concerning educational and service related issues.

These mechanisms promote effective education of cadets, giving quick solutions the revealed problems and assurance of cadets' progress.

It is praiseworthy that all the alumni of MAU do their military service as officers in different military units of [REDACTED] and during the service years they have the opportunity to participate in training courses for officers and to have career promotion.

The Expert panel positively evaluates the fact that cadets have the opportunity to participate in research activities together with teaching staff at the same time the Expert Panel finds that more involvement of cadets in scientific-research activities will foster development of analytical and research skills of cadets. It is praiseworthy that there are mechanisms for the evaluation of educational and consultancy services at MAU that foster improvement of quality of the provided services.

**Conclusion:** Taking into account that there are clear and transparent mechanisms for recruitment, selection and admission of cadets, there are respective policy and procedures to reveal educational needs of cadets and to give solutions, there are opportunities for cadets to turn to the administrative staff and get support, cadets are satisfied with the provided educational needs, there is 100% employability of MAU graduates, there is a body at MAU responsible for the protection of cadets' rights and a number of other mechanisms ("trust phone", "Quick feedback box") the Expert panel finds that MAU meets the requirements of Criterion 4.

***The compliance of the institution's institutional capacities with the requirements of criterion 4 is satisfactory.***

## V. TEACHING AND SUPPORT STAFF

**CRITERION: The Institution has a highly qualified teaching and support staffs to achieve the set goals for academic programs and Institution's mission.**

### FACTS

**5.1. The Institution has policies and procedures promoting recruitment of a highly qualified teaching and supporting staff for the provision of academic programs.**

One of the main objectives of the MAU SP 2017-2020 is "the preparation and retraining of military officers and highly qualified specialists in scientific-educational and scientific spheres in respective military profession". Among the basic principles of the MA SP the comprehensive development of regular and changeable staff as well as commitment to the RA AF Officer's honor rules are given importance to.

The competition based selection of MAU teaching staff is carried out according to the Regulation on Organization and Implementation of Competition for the Vacancy of Teacher at RA MoD Military Education set by the order N198 of RA MoD as of 10.03.2012 and by the order of RA MoD N164 as of 14.02.2013 about making changes and additions in the Regulation. Additional requirements about qualification and expertise of the applicants of the competition as well as the questionnaire for the competition are presented by MAU. The information about competition and the list of necessary documents for participating in the competition are published in the official newspaper "Armenian Soldier" (Hay Zinvor) which is prepared by the RA MoD staff and Military Education Department based on MA demands.

Additional requirements about qualification and expertise of the applicants of the competition as well as the questionnaire for the competition are presented by MAU taking into consideration the peculiarities of the academic programs (specialized questionnaires for the competition of MAU teachers, chair session records on discussions of surveys).

Each chair submits its requirement set for the teaching staff with necessary professional qualities and respective substantiation to the given department/faculty after which the requirement set by the senior manager is reached to the MAU Head and MoD with appropriate grounds. The appointment of winners in respective position is made based on respective RA regulation which defines the frame of obligations and competences of MAU and teachers. On the other hand, the meetings with MAU representatives showed that there are mainly positions of teachers and senior teachers and there are few positions set for associate professors.

The efficiency of policy and procedures on admission and dismissal of MAU teaching and support staff is evaluated by the HR and Military Education Departments. In 2012 due to evaluation results MAU recruitment regulation was transmitted into competition based regulation.

As the meetings with MAU stakeholders showed, there are some problems regarding teaching staff recruitment; as a result of transfer of troops the specialists are deprived of some privileges, in particular, because of the transition the financial means of the given staff member are decreased which is conditioned by the low cost of time norms.

## **5.2 The requirements for qualifications of teaching staff per academic program are comprehensively stated.**

The 3.2 objective of the 3<sup>rd</sup> strategic goal set by the MAU SP defines the following: “To clarify the requirements set for the teaching staff to ensure the alignment of development of professional chairs with requirements of academic programs”.

There is an MAU Order on Approval of Job Descriptions of Officer Staff Categories. On the other hand, there are requirements set for professional qualities of teaching staff in MAU PAPs, in particular, the requirements refer to basic education in respective professional direction, responsibility to carry out research and scientific-methodical activities, scientific level (scientific title, honorary titles, etc.) or work experience and military service in respective professional field in case of teaching of ad-hoc courses, experience and competences of applying respective technical facilities. However, the mentioned requirements are generic to all PAPs and are not specified for each profession.

It should be noted that both former graduates of the University and representatives of public higher education institutions (National Polytechnic University of Armenia, International Scientific-Educational Center of RA NAS, etc.) teach at MAU, moreover, the requirements set for MAU teaching staff refer to them too.

## **5.3 The Institution has well established policies and procedures for the periodic evaluation of the teaching staff.**

The policy on regular evaluation of the teaching staff is mainly based on the orders of RA MoD, RA laws and internal regulations of the University. Based on them, evaluation mechanisms and tools have been developed. In particular:

- class observations approved by the MAU Head in 20.12.2016;
- regulation on conduction of “Best Chair” nomination approved by the MAU Head in 01.10.2015;
- evaluation of teaching staff (professional preparedness, pedagogical competences, personal/moral qualities, etc.) by military students.

Based on the regulation on class observations, class observations are conducted at the beginning of each semester in accordance with the approved time-schedule, not more than twice per semester for every teacher. In case of unplanned class observations the teacher is usually informed about it the same day (defined for class observation) or the day before class observation. The following documents are set for the organization and documentation of class observation process: class evaluation questionnaire and analysis of class observation results. The class observer or the representative of class observation committee presents the results of analysis in the upcoming session of the chair. The evaluation questionnaire includes the following points: organization, teaching and learning methods, practical, seminar and lab components and group work. The analysis results emphasize the strong and weak points of the observed class, and respective remarks and suggestions are provided.

However, it should be mentioned that in some chairs the class observation questionnaires were filled in not for all teachers. The analyses of class observations and seminars held for MAU teachers by MAU show that military teachers have some problems in terms of pedagogical preparedness. The meetings have also shown that as a result of class observations teachers are provided consultancy particularly on teaching style and provided materials which are further used by teachers.

The “Best Chair” competition is held at the end of semesters of each academic year, in January and July. The indicators set for the evaluation of activities of chairs participating in the competition are as follows: educational-organizational, methodical, scientific and upbringing/educational activities carried out by teachers as well as organization of additional education. The winner is awarded with certificate of Honor.

#### **5.4 The Institution promotes professional development for the teaching staff in accordance to the needs outlined during regular evaluations (both internal and external).**

The 3.3 objective of the 3<sup>rd</sup> strategic goal set by the MAU SP defines the following: “To carry out regular trainings and attestation of MAU staff, including teachers, in accordance with the set regulation”.

The requirements set for the competences of teachers are reviewed in case new equipment or a new subject is integrated. The objectives set for the teaching staff are changed accordingly. MAU organizes trainings, ensures business trips for teachers and new technical passports are being studied.

The needs for teachers’ qualification enhancement also depend on the necessity to obtain new military equipment and to integrate a new subject in PAPs. Besides, the results of class observations are taken into consideration in the selection of teacher training directions and for the formation of schedule.

Based on the needs for qualification enhancement, methodical, professional and language trainings are conducted for teachers. The teachers have trainings in other RA public higher education institutions and foreign military universities.

In order to upgrade the level of English language proficiency among teachers, some courses are organized at both MAU and MoD. However, as the analysis carried out by the Division of Quality Assurance and Analysis shows, the level of English proficiency among teaching staff is very low (22%), and 86% of teachers need foreign language training courses. 67% of teachers need methodical trainings, and 62% - professional trainings.



In spite of the MAU plans of cooperation with other higher education institutions (Yerevan State University, Armenian State Pedagogical University after Kh. Abovyan, etc.) for 2014-2017, MAU military teaching staff have some problems relating qualification in Pedagogy.

MAU also takes some internal activities for teaching staff, in particular, organization of seminars, scientific-technical conferences, educational-methodical meetings, provision of methodical support, conduction of open and demonstrative classes as well as sharing best practice.

The efficiency of activities directed to capacity building of teachers is evaluated through reports on MAU classes of qualification enhancement for teaching staff. In order to have an overall picture, reports cover analyses of results of surveys conducted among military students, as well as on qualifications and command preparation. However, as the above mentioned analyses show, the results are not satisfactory yet.

**5.5 The Institution ensures that there is a permanent staff for the stable provision of the academic programs.**

In cooperation with MoD, MAU adheres a policy on sustainability of ensuring military teaching staff. A set of privileges are awarded to the military servant staff, including:

- free medical aid,
- provision of flats (till 2018),
- organization of free treatment and rest in “Mountainous Armenia” recreation center,
- compensation of flat rental,
- compensation of travel expenses for homecoming during vocation of military servants living far,
- right to travel for free by all urban passenger transportation means regardless of the kind of ownership (except for taxi) in RA,
  - assurance of high military long-term retirement,
  - free provision of uniform, etc.

The average age of military servant teachers of MAU is presented in the Table 1:

**Table 1**

Age average of teaching staff in the last 3 years			
year	2016	2017	2018
Military servant teacher	44	45	46
Civil servant teacher	60	61	62

As the table shows, the average age of military servant teachers is comparatively low. It is more vividly manifested in the Faculty of General Education Subjects where the average age is 37 (as a comparison it should be noted that the average age of teachers of Anti-aircraft Defence and Signal Faculties is 49). The indicator is higher in case of civil servant teachers, in particular, it was 65 in the Signal Faculty in 2018.

It must be mentioned that young teachers are not motivated to teach at MAU because as a result of transfer of troops the financial means of the given staff member are decreased conditioned by the low cost of time norms. Besides, MAU doesn't give opportunities to have a rest to teachers



The Table 4 presents the number of Candidates of Sciences and Associate Professors among MAU teaching staff in the last 3 years.

**Table 4**

Teaching staff	2015/2016 academic year	2016/2017 academic year	2017/2018 academic year
Number of Candidates of Sciences	15	15	13
Number of Associate Professors	6	7	8

As the Table 4 shows, in case of MAU faculties, the number of Candidates of Sciences and Associate Professors among MAU teaching staff is low. At the same time, the low indicator is justified by MAU by the fact that there aren't professional commissions awarding military scientific degrees in RA. Besides, the University states that it discusses the issue on establishing such a commission with the RA Higher Certifying Commission. However, for now, representatives of MAU teaching staff have business trips to Russia to get scientific degrees upon necessity.

**5.7 The Institution has necessary administrative and support staffs to achieve the strategic goals.**

The educational process at MAU is organized and directed by coordination of the Educational-Methodical Department, Center for Military-Professional Education, faculties and chairs.

The governing bodies and the structure of the University were updated in 2016. The re-announcement of vacancies was made in 2016. The Division of Quality Assurance and Analysis which is a structural unit of the Educational-Methodical Department was re-organized into Department of Quality Assurance and Analysis (2016). Center for Military-Professional Education was established in MAU the functional framework of which includes:

- organization of qualification enhancement courses for officers in the frame of facultative academic programs;
- implementation of facultative academic programs for male students who have deferment rights and study at any of RA higher education institutions (including students involved in RA MoD state-funded and “I have the Honor” programs).

The responsibilities of MAU administrative and support staff are defined by the job descriptions approved by the Ministry of the RA MoD.

***JUDGEMENTS.***

The expert panel evaluates it positive that the University has policy and procedures on selection of teaching and support staff for the implementation of PAPs. It is also positive that there are highly qualified teaching and support staff members ensuring the implementation of PAPs. The positioning in MAU is based on competition which is jointly organized by MAU and MoD. The standards set for professional qualities of teaching staff are generic in PAPs, there are no job descriptions/passports of teaching staff categories.

The expert panel finds that some activities of teaching staff evaluation are carried out at MAU which promotes the improvement of teaching quality and assurance of teachers' professional development policy.

Another positive fact is that teachers of MAU are specialists and military servants who are competent in using military equipment. The mentioned factor fosters the organization of learning outcome (LO)-based education while implementing PAPs as well as the preparation of specialists having specific professional skills upon graduation.

Currently there are mainly clearly set mechanisms and procedures fostering the development of military teachers, which may weaken the sustainability of teaching staff of namely the Faculty of General Education. At the same time, teachers have a heavy workload which may hinder their research activities.

**CONCLUSION.** Taking into consideration the fact that there are policy and procedures on selection of teaching and support staff in the University, teachers' evaluation and teacher trainings are carried out, business trips and collaborative activities directed to teachers' development are ensured and the teaching staff consists of specialists who are professionalized in military field, the expert panel finds that MAU is ensured with highly qualified teaching and support staff necessary for the fulfillment of the University's mission and goals set by PAPs.

*The compliance of the institution's institutional capacities with the requirements of criterion 5 is satisfactory.*

## VI. RESEARCH AND DEVELOPMENT

**CRITERION: The Institution ensures the implementation of research activity and the link of the research with teaching and learning.**

### FACTS

#### **6.1 The Institution has a clear strategy promoting its research interests and ambitions.**

The research interests of the University are formulated in MAU SP 2017-2020 which was developed based on the RA AF development plan. The MAU interests in the research field cover the conduction of practical and theoretic research activities in professional fields of the University (aviation, Anti-air Defence and Signal) in line with current needs set by the RA AF.

In 2016 the five-year perspective plan of MAU scientific-research activities for 2016-2020 was approved. The document reflects the scientific-research directions and topics of separate units.

MAU states that there is a Scientific-technical and Testing Department which has two divisions [REDACTED]

#### **6.2 The Institution has a long-term strategy and med term and short-term programs that address its research interests and ambitions.**

Each faculty, chair and teacher of MAU prepares annual plan of scientific-pedagogical activities based on the above mentioned perspective plan. MAU doesn't have a separate plan for short-term and mid-term scientific-research activities. For this reason the 3<sup>rd</sup> section of the plan on scientific-pedagogical activities is called "Scientific-Research Activities". Based on the mentioned plans, faculties present monthly, semester and annual reports to the MAU Head and Deputy Head on Educational and Scientific Affairs. However, it should be mentioned that the sequence of steps for presented topics is not mentioned in plans and respectively the professional direction of MAU is not reflected in them.

Once a year MAU plans and holds scientific-technical conferences by involving teachers and students. The works presented in the conference which often derive from the five-year research plan, are edited and published in the manual of MAU scientific-technical conferences.

**6.3 The Institution ensures the implementation of research and its development through sound policies and procedures.**

In order to foster scientific-research activities of MAU self-evaluation, discussions of respective issues are organized at Scientific Council sessions.

MAU teaching staff members and students participate in annual conferences and workshops organized by RA Military University after V. Sargsyan and other public higher education institutions. The Table 5 shows the indicators of MAU publications, conferences, educational manuals and educational-methodical works in 2013-2017:

**Table 5**

Indicator	2013	2014	2015	2016	2017
MAU teachers' and students' participation in scientific-technical conferences	15	12	13	12	13
Publications in international peer-reviewed professional journals	9	3	3	0	0
Publications in RA peer-reviewed professional journals	9	5	6	9	1

As the Table 5 shows, the level of participation in conferences and workshops is low, and there are few scientific publications.

MAU doesn't have its own scientific journal but the articles covering topics of the military sphere are published in "Armenian Army" military-scientific journal.

The expert panel states that MAU takes some activities in the direction of Applied Science

MoD. In the directions of Signal and UAVs some activities are taken which aim to modernize some technical units. MAU has constructed the J134 Aircraft Flight Control System and has elaborated the software. However, there isn't any clear policy on conduction and development of research activities yet, and respective procedures are lacking.

In 2012-2017 three teachers of MAU defended PhD dissertations and were awarded the scientific degree of Candidate of Technical Sciences.

The expert panel states that there isn't any base laboratory which would be established as a result of competition for scientific topics application aimed at assurance of contractual (thematic) funding of scientific and scientific-technical activities of the University. Till now MAU hasn't implemented and research grant projects. The University hasn't applied for a competition announced for support of dual-purpose projects within the frame of contractual (thematic) funding of scientific and scientific-technical activities.

MAU doesn't operate financial policy on research activities.

**6.4 The Institution emphasizes internationalization of its research.**

The 2.3 objective of the 2<sup>nd</sup> strategic goal set by the MAU SP defines the following: “To establish collaboration with other institutions in the research field.”

MAU doesn't carry out joint research activities at international level, and there are not international scientific projects and jointly developed topics in cooperation with foreign universities and other institutions. The absence of international policy is conditioned by the lack of such a requirement by the RA MoD as well as by the principle of confidentiality which MAU holds.

On the other hand, MAU military students have participated in international conferences, competitions and Olympiads, in particular:

- in 2015 three military students by MAU teachers' instructions participated in the 3<sup>rd</sup> international competition of military studies dedicated to the 70<sup>th</sup> anniversary of Great Patriotic war. The competition was held in Russia. Two of MAU students were awarded certificates of Honor.
- in 2016 the "Ararat" team formed by MAU teachers' supervision took part in the 5<sup>th</sup> international competition on "Fly Your Ideas" jointly organized by "Airbus" organization and UNESCO. Four MAU military students were involved in the team. The "Ararat" team was the only one in the region among 72 countries which passed first and second phases. The non-participation in the final phase was conditioned by the great amount of financial expenses.

**6.5 The Institution has well established mechanisms for linking research with teaching.**

The 2.2 objective of the 2<sup>nd</sup> strategic goal set by the MAU SP defines the following: “To ensure the integration of scientific-research activities and their outcomes in educational process”.

With the aim to link educational and research activities, teachers and students jointly prepare reports for conferences which are held both in MAU and other higher education institutions.

The methodical works of teachers are also considered to be a mechanism which links educational process with research activities. Methodical works include the development of educational manuals, guidelines and teachers' summaries. The aim of methodical works is to improve the methodology of the university, to enhance quality, to establish methodical base, to increase the professional level of teachers, students and commanders of structural units. The Table 6 shows the number of developed methodical works of MAU in 2013-2017:

**Table 6**

Name of Methodical Work	2013	2014	2015	2016	2017
Educational manuals, methodical guidelines and works, teachers' summaries, task and scheme collections	29	23	50	35	95

According to the MAU self-evaluation, a new profession “Experimenting and Investment of Unmanned Aerial Vehicles” has been invested in MAU the implementation of which is ensured jointly by the Scientific-technical and Testing Department, thus providing an opportunity to interlink educational and research activities.

[REDACTED]

[REDACTED]

[REDACTED]

### ***JUDGEMENTS.***

MAU SP reflects the research directions of the University, there are long-term and short-term plans, however, the sequence of steps for the conduction of research topics is not defined, and topics have a visionary character and they do not foster the innovation at MAU. This hinders the definition of research priorities and their purposeful fulfillment. The alignment of military titles with scientific titles at MAU is not always justified and it puts at risk the efficiency of implementation of scientific-research activities of the University.

There isn't any clearly set policy on development of the University in terms of research activities, and respective procedures are lacking which hinders the continuous development of research activities and commercialization of their outcomes.

It is worth praising that the University carries out some research activities, in particular, [REDACTED]

[REDACTED]

[REDACTED] Besides, each chair carries out some activities which are directed to improvement and modernization of separate military technical units.

However, it must be mentioned that the research link between MAU and scientific institutions is lacking. The low number of scientific works published by the MAU staff is disturbing as far as it indicates the low level of activeness in research activities.

MAU needs to work in the direction of internationalization of its research activities as far as up to now the University hasn't fulfilled any significant research activity at international level.

The preparation of methodical works by teachers is viewed as a mechanism of linking research and educational process of MAU. There are few research studies implemented by teachers and students. If they are fulfilled and are innovative, they will give incentives to the development of analytic and creative approaches of students, will foster the improvement of teaching quality as well as will interlink educational and research fields.

**CONCLUSION.** Taking into consideration the fact that there are no mechanisms fostering the implementation of innovative research activities by teaching staff and students, MoD doesn't provide sufficient financial resources for research, the participation of MAU teachers in external scientific-research projects is lacking, the internationalization of the University's research activity is almost absent as well as the links between educational and research activities are poor, the expert panel finds that MAU doesn't ensure the implementation of research and its link with educational process.

***The compliance of the institution's institutional capacities with the requirements of criterion 6 is unsatisfactory.***

## **VII. INFRASTRUCTURE AND RECOURSES**

**CRITERION: The Institution has necessary resources to create learning environment and to effectively support the implementation of its stated mission and goals.**

**FACTS**

### **7.1 The Institution has an appropriate learning environment for the implementation of current academic programs.**

The 4<sup>th</sup> strategic goal set in the MAU SP defines the following: “To improve the building facilities and material-technical base of the University in line with needs set for efficient implementation of educational and research programs.”

MAU carries out activities in two academic buildings. The University has two educational battalions – barracks, two-row square, one sport ground, boiler room, canteen, production section, electronic library, club. There are laboratories of physics and electronics, radio engineering, cabinets of English language, informatics, radio signal military equipment, radio-relay and remote communication technology, encrypted signal, automatic signal control systems. There are also aircraft vehicles, aviation equipment exploitation salon with appropriate equipment, artillery armament, training missiles, anti-missile defence equipment and military hardware.

The improvement of educational environment and equipment of material-technical base are among strategic objectives of MAU which are stipulated as the 4.2nd objective of the 4th goal of SP. In particular, it is mentioned: “To develop and modernize the laboratory and professional classroom base in line with state standards and requirements set by PAPs and curricula”. The majority of PAPs have a practical character and they require special military technical equipment which can generally be found in Arzni, Erebuni and Gyumri.

There is a library at MAU which has stacks and an auditorium-reading hall. There are a projector and 25 computers with internet connection. Here educational-methodical works developed by MAU staff are also kept.

However, as surveys conducted by MAU show, the 22% of students are not satisfied with library fund. During the meetings with the expert panel teachers also mentioned about their dissatisfaction with current library fund by emphasizing the lack of modern professional and military literature.

As the meetings with students and teachers during the site-visit showed, the equipment with educational-material resources of MAU is not at high level yet. Besides, according to the self-evaluation of the University, the 30% of respondents are not satisfied with educational-material base of MAU (about 43% of Aviation Faculty).

### **7.2 The Institution provides appropriate financial resources with necessary equipment and facilities as needed to achieve its mission and goals.**

MAU doesn't have financial inflows from the educational activity and grants. But 1 million AMD for each semester is provided to MAU from the off-budget fund by the RA MoD order which is allocated to the University for utility costs and acquisition of economic goods.

Prior to the budget year, the estimate for the budget year is calculated taking into account the MAU staff salaries, service bonuses, rewards, expenses for local business trips, necessary lab facilities and necessary items for equipment of material-technical base.

MAU representatives find that the financial means provided by the RA MoD, particularly from the perspective of lab facilities and material-technical base, are not sufficient for ensuring their development.

### **7.3 The Institution has policy on financial distribution and capacity to sustain and ensure the integrity and continuity of the programs offered at the Institution.**



MAU gets funding from the RA MoD. The acquisition of educational-material, utility and economic and material resources is ensured based on application-calculations which are sent to respective MoD structural units in advance.

Taking into consideration the fulfillment of MAU goals and their continuous implementation, MAU regularly sends applications to the RA MoD. E.g. in 2017 a letter was sent to the HR Head of the RA MoD and the Head of Department of HR and Military Education of the RA MoD which contained 9 points reflecting the needs for necessary resources.

In 2015-2016 academic year educational technical means (projectors, interactive boards) and computer equipment have been provided to MAU by the RA MoD.

#### **7.4 The Institution's resource base supports the implementation of Institution's academic programs and strategic plan, which promotes sustainability and continuous improvement of quality.**

The current resource base of the University enables the implementation of PAPs. During the site-visit to MAU the expert panel visited a number of laboratories of Faculties of Aviation Signal and Anti-Defence Protection. In particular, in the Aviation Center there were training equipment of helicopters and airplanes (only the fixed versions were available as far as the movable versions are very expensive). There were also engine models and cuts sections, cooling systems, control mechanisms, reducers, etc. There were also various educational boards in the hall. In addition, there were radio-relay, signal and other laboratories equipped with necessary facilities. The expert panel visited "Arzni" airport and observe resources there. During the site-visit military students were having one-time practical classes in the Signal Faculty. The signal, radio-relay and encrypting stations were available there. In accordance with the supervisor's assignments, military students regulated the antennas and established the link between the two stations with the support group.

The suggestions on modernization of resource base, improvement and acquisition of new facilities and equipment are submitted to the RA MoD by the Head of MAU.

Because of the absence of some equipment and laboratories in the territory of MAU the practical classes are held in operating military units by the application of combat equipment. The results of surveys conducted among military students and teaching staff show that the majority of respondents think that the study of those technical equipment immediately in MAU is more efficient which will spare time and will reduce transportation expenses.

As far as the laboratory base of MAU is not fully equipped, some lab activities are held in engineering laboratories of National Polytechnic University of Armenia which are equipped with educational stands provided by the NATIONAL INSTRUMENTS organization.

#### **7.5 The Institution has a sound policy and procedure to manage information and documentation.**

The information and documentation circulation processes of MAU as well as the efficiency of their management are checked by respective structural units of the RA MoD.

The list of documents is clarified for every structural unit of MAU (faculties, chairs, divisions). Based on military status, the documentation circulation of the University is mainly operated on paper-based principle. There are no invested electronic documentation circulation systems in the University.

The dissemination of information on MAU is ensured by means of announcements, paper-based and electronic press, the official webpage of MAU – [www.mil.am](http://www.mil.am), informational manuals and booklets.

**7.6 The Institution creates safe and secure environment through health and safety mechanisms taking into account the students with special needs.**

The control of security assurance of military service at MAU is regulated by:

1. Manual of RA AF Medical Insurance in Peace Time, Yerevan, 2013, approved by the RA MoD decree N 1393, 04.12.2013
2. Code of RA AF Internal Service, Yerevan, 2017, approved by the RA Law 199, 3 December 1996
3. Manual on “The Organization of Service and Security Assurance of Military Service of RA AF”, Yerevan, 2010, approved by the RA MoD decree N 1253, 10.11.2009
4. Guide on “Security Assurance of Military Service”, Yerevan, 2010, approved by the RA MoD decree N 16, 16.01.2010

MAU has a checkpoint to ensure safety.

The University has a Medical Unit which has a reception hall, bandage room, bathroom, dental cabinet, dining room, meeting room, infirmaries. The operation of the Medical Unit’s activity is under supervision of the MAU Head and the RA MoD Military Medical Division and Hygiene and Anti-Epidemic Service (HAES).

The annual plan of the Medical Unit covers the following activities: preventive medical measures, sanitary and hygienic and anti-epidemic measures and other activities. There is also a working plan of sanitary days. It is remarkable that the staff of the Medical Unit have received many rewards.

With the aim to evaluate the efficiency of the Medical Unit’s services, MAU uses the register for appeals and suggestions where military students and servants who have been provided medical service can give their feedback. Only positive feedbacks have been registered so far. In case military students have complaints, they can also use posted “Trust Phone Numbers” or submit an appeal-application to the Military Medical Department through their parents. There haven’t been such cases either.

The MAU Division of QA and Analysis conducted surveys among students for the evaluation of activities of the Medical Unit and Canteen. The results are as follows (Table 8):

**Table 8**

Activity of Medical Unit				
35	28	93	44	8
Very low	Low	Middle	High	Very high
Activity of Canteen				
44	31	86	33	6
Very low	Low	Middle	High	Very high
Proportion of Food (with 5-grade scale)				

	14%	20%	49%	17%
	1 or 2 score(s)	3 scores	4 scores	5 scores
<b>Quality of Food (with 5-grade scale)</b>				
	11%	26%	45%	
	2 scores	3 scores	4 scores	
<b>Satisfaction with Living Conditions</b>				
	11%	38%	42%	
	2 scores	3 scores	4 grade	

It should be mentioned that during the site-visit it turned out that the safety regulations are posted in all laboratories, specialized classrooms and training halls.

Taking into consideration the peculiarity of the University, there aren't conditions for students with special needs.

**7.7 The Institution has special mechanisms in place for the evaluation of the effectiveness, applicability and availability of resources given to the teaching staff and learners.**

In order to evaluate the applicability, availability and efficiency of resources provided to military students and teachers, MAU regularly carries out identification of needs by an immediate superior. As the stakeholders stated in meetings of the site-visit, the issues on resource enrichment, identification and satisfaction of students' and teachers' needs are in the center of attention of MAU management staff, in particular, the University has applied to the RA MoD regarding issues on re-equipment of some resources.

In 2017 the Division of QA and Analysis developed mechanism for evaluation of applicability, availability and efficiency of provided resources by means of conduction of surveys among students and teachers. The full application of the mentioned mechanism was made in 2017, hence the analyses on efficiency haven't been made yet.

***JUDGEMENTS.***

The expert panel finds that in general MAU resources currently ensure the implementation of the goals set by PAPs. At the same time, the existing educational resources, professional cabinets, laboratories and training rooms need technical equipment which was stated by stakeholders who participated in the site-visit. As the surveys conducted among MAU stakeholders state, teachers and students are not satisfied with library resources which is worrisome from the perspective of implementation of PAPs and acquisition of set learning outcomes.

Because of the absence of some technical equipment and laboratories some classes are held in military units and other public higher education institutions. The results of surveys conducted among students and teachers have shown that the majority of respondents find that the conduction of those classes exactly in MAU would be efficient and would thus reduce time and transportation expenses.

The expert panel positively evaluates the fact that there is a developed mechanism of distribution of financial means. There are some planned expenses in the annual budget which are

directed to the implementation of MAU goals but the expenses are not specified according to strategic goals and PAPs which would make the financial investment more targeted. It is praiseworthy that the RA MoD supports the University and provides financial resources, however, the financial means provided for utility costs and acquisition of other economic items for every semester are not always sufficient for solving unplanned problems. On the other hand, it takes long to ensure the cycle of main financial investment increase. The lack of diversity of financial inflow sources, the scarcity of invested means which are sufficient only for the implementation of current goals, can put at risk the further development of the University and the equipment of modern material-technical base.

MAU uses the mechanism of survey conduction for the evaluation of educational environment which fosters the identification of stakeholders' needs and improvement of MAU's educational environment. However, in some aspects (research, library, internationalization, medical service) the limited investments may weaken the efficiency of SP implementation.

The activities directed to the establishment of safe and secure environment in the University promote the increase of trust.

**CONCLUSION:** Taking into consideration the fact that by the support of the RA MoD some efforts have been made in the direction of improvement and enrichment of resources, the University ensures necessary conditions for the implementation of PAPs, there is a policy on distribution of financial means, MAU has established a safe and secure educational environment, the expert panel finds that MAU has necessary conditions for the formation of educational environment and implementation of defined mission and goals.

*The compliance of the institution's institutional capacities with the requirements of criterion 7 is satisfactory.*

## VIII. SOCIAL RESPONSIBILITY

**CRITERION: The Institution is accountable to the government and society for the education it offers and the resources it uses as well as for the research it conducts.**

### FACTS

#### **8.1. The Institution has clear policy on accountability.**

The accountability process of MAU is regulated by the orders of the RA MoD and RA AF General Staff as well as MAU Charter. The Head of MAU submits semester and annual reports in the collegial sessions of the RA MoD, to the Deputy Head of RA MoD General Staff (in general services) and to the Deputy Minister of Defence.

The Scientific Council of the University listens the reports on the organization and progression of educational processes presented by the Head of MAU, heads of chairs and faculties and other officials as well as reports on upbringing and military discipline issues from respective responsible staff members.

The heads of MAU faculties submit quarterly reports in accordance with the regulation, and in some cases reports are presented every month. All the documents for reporting issues are filled in according to the approved formats. However, it must be mentioned that reports mainly do not include qualitative analyses.

## **8.2. The Institution ensures transparency of its procedures and processes and makes them publicly available.**

Taking into consideration the fact that the University also has a status of military status, the availability and public transparency of its procedures are strictly limited. Reports, check-up results, relating reports and analyses are available only to respective structural units of the RA MoD and RA AF.

MAU doesn't have a separate webpage but it disseminates necessary materials (which are allowed to be publicly available) are disseminated by means of the official website of the RA MoD – [www.mil.am](http://www.mil.am), the “Armenian Soldier” weekly newspaper, military TV programs, published informative manuals, EXPOs, announcements and booklets.

MAU representatives stated that the information available on the MAU webpage ([www.mil.am](http://www.mil.am)) is regularly refreshed.

## **8.3. The Institution has sustainable feedback mechanisms for establishing contacts with society.**

The MAU Deputy Head on Personnel Affairs is officially responsible for public relations; he ensures the University's link with public organizations and NGOs. The University has organized visits for officers to different schools of Yerevan for lectures and illumination activities, had meetings with groups of schoolchildren to introduce the activities of the University as well as participated in joint events with NGOs and other higher education institutions and meetings with parents which are regularly organized in MAU.

According to the MAU management staff, each month the Head of MAU and his deputies dedicate one day for admission of citizens.

## **8.4. The Institution has mechanisms that ensure knowledge /value/ transfer to the society.**

The University pays great attention to the educational (upbringing) activities and those which aim to shape patriotic officers and to ensure their multidirectional development.

MAU organizes courses with RA higher education institutions, in particular:

- the course on “Preliminary Military Preparedness” for students studying the profession of “Military Pedagogy and Psychology” at Armenian State Pedagogical University after Kh. Abovyan;
- organization and conduction of the course on “Military Preparedness” for students studying the profession of “Military Communication Techniques” at National Polytechnic University of Armenia and Yerevan State University;
- organization of professional subject courses for students of National Polytechnic University of Armenia studying the profession of “Aerial Vehicles and Engines”.

According to MAU reports, the University has mechanisms of sharing knowledge with the society organized in the MAU club, by implementing the following events:

- 28 January 2017 – the event dedicated to the 25<sup>th</sup> anniversary of the Armenian Army in which the Shengavit cultural community members also participated;
- 09 May 2017 – the event dedicated to the 72<sup>nd</sup> victory of the Great Patriotic War and Shushi liberation where veterans of Artshakh war and other guests were present;
- 21-27 August 2017 – MAU representatives participated in “Baze 2017” Pan-Armenian Youth gathering, etc.

The University organizes annual courses for officers with academic groups of alumni of RA public universities whose professional field involves Military Signal and Air Defence Protection.

The University has established a Military-Professional Educational Center which organizes qualification enhancement courses for officers within the framework of facultative educational courses, including training courses for platoons, for company and artillery unit commanders with three-month and five-month duration aimed at appointment of positions for Head of Signal Company and Signal Battalion, Head of Zenith-rocket forces and Commander of Radiotechnical Forces, Heads of Raedolocation Units and Head of the Staff of Zenith-rocket Division, signal brigade and Head of Anti-aircraft Defence, as well as implements facultative academic programs for male students who have deferment rights and study at any of RA higher education institutions (including students involved in RA MoD state-funded and “I have the Honor” programs).

### ***JUDGEMENTS.***

The expert panel evaluates it positive that MAU has clear operating bottom-up mechanisms of accountability – up to the Head of MAU, Deputy Minister of Defence and Minister of Defence, which cover all the fields of the University’s activities and are operated on a regular basis. The results of activities conducted by MAU structural units and officers are summed up based on reports. The mentioned mechanism fosters the increase of efficiency and development of MAU performance. At the same time the expert panel finds that the absence of qualitative analyses in some reports will hardly foster the further development of the University.

Based on MAU peculiarities, the transparency of its activities and public availability are strictly limited, and the University doesn’t have its own website. Nevertheless, the University tries to make its activities publicly available by means of media, newspapers and publications which promotes the assurance of transparency of activity results. At the same time the expert panel finds that the concentration of the whole information about the university onto its own website will increase public interest and inflow of applicants.

The expert panel evaluates its positive that there are mechanisms in MAU fostering public relations, in particular, meetings with parents of MAU military students, organization of visits to MAU for schoolchildren, etc., which reinforce public relations. The expert panel finds that the continuous development of current mechanisms and the investment of new ones will lead to the increase of the level of MAU’s attraction.

The expert panel finds it positive that the University is active in multidirectional processes directed to the application of current mechanisms of public knowledge sharing and provision of continuous education /one-time courses for officers, different events, etc./ which promote dissemination of best practice.

**CONCLUSION.** Taking into consideration the fact that there is a clearly set operating mechanism of accountability which mainly identifies current problems of the University, the information provided to the society is generally available, there are mechanisms ensuring feedback and knowledge sharing, and MAU is accountable to the RA MoD for the education it implements and carried out activities, the expert panel finds that MAU meets the requirements of the Criterion 8.

***The compliance of the institution’s institutional capacities with the requirements of criterion 8 is satisfactory.***

## IX.EXTERNAL RELATIONS AND INTERNATIONALIZATION

**CRITERION: The Institution promotes experience exchange and enhancement through its sound external relations practices, thus promoting internationalization of the Institution.**

### FACTS

**9.1 The Institution promotes its external relations through sound policies and procedures aimed at creating an environment conducive to experience exchange and enhancement and internationalization.**

The development and direct management of MAU's policy and procedures on external relations and internationalization are carried out by the RA MoD. The University is responsible for the implementation of directions of external relations development and not for the planning of the mentioned activities.

The authorities of the University in the sphere of external relations and internationalization are very limited and this process is regulated by the respective structural unit of the RA MoD. At the same time, opportunities of overcoming obstacles relating international relations aren't studied by the University yet. Currently MAU doesn't plan respective activities, financial and human resources for the allocation of development of external relations, enlargement of scope of integration into RA higher education system and cooperation with other foreign military education institutions to promote studies of best international practices.

MAU administrative staff members' business trips to other military education institutions and their participation in trainings are also ensured based on the MAU application submitted to the RA MoD Staff and Military Education Department. As MAU states, the results of business trips and trainings are summed up and particularly improvement directed changes are made in PAPs.

There are no mobility programs for military students.

**9.2 The Institution's external relations infrastructure ensures regulated process.**

Conditioned by the centralized implementation of activities of external relations and internationalization by the RA MoD Staff and Military Education Department, MAU doesn't have a separate structural unit ensuring external relations and internationalization. The Deputy Head of the RA MoD Staff and Military Education Department is considered to be the responsible person for the coordination of mentioned activities based on the order of Head of MAU.

**9.3 The Institution effectively collaborates with local and international counterparts.**

MAU cooperates with RA higher education institutions (RA MoD Military University after V. Sargsyan, National Polytechnic University of Armenia, Yerevan State University, National University of Architecture and Construction of Armenia, Armenian State Pedagogical University of Armenia) based on the cooperation agreements in accordance with the RA Deputy Minister. The University doesn't have the authority to independently sign international contracts.

According to the multidirectional plan within the cooperation between the RA MoD and NATO, MAU holds "Annual International Workshop of Educators" which is devoted to approaches and methods of organization of modern education, study of leading international practice and contemporary requirements of military education. During the mentioned workshop MAU representatives present reports. In the end they submit a report to the Head of MAU with suggestions directed to the increase of efficiency of educational process of MAU.

According to the action plan within the cooperation between the RA MoD and NATO in the framework of the DEEP project, working meetings on "Checking of Results of Annual Cooperation, Perspectives of Problems for the Upcoming Year" are annually organized within the framework of visit made by international military experts and MAU Commander Staff. MAU Head and Deputy Head on Educational and Scientific Affairs give reports on "Current Reforms at MAU: Progress in Activities of Investment of Bologna Process in MAU's Military Educational System and Respective Improvements of Academic Programs". As a result of meeting the working group submits a written report to the Deputy Head of the RA MoD in which the results of visits and observations are summed up, and the achievements and omissions of military universities are presented.

#### **9.4 The Institution ensures internal stakeholders' appropriate level of a foreign language to enhance efficiency of internationalization.**

Apart from the organization of main foreign language courses for military students based on open curricula, facultative courses are also conducted at MAU. In 2016-2017 academic year a facultative academic course of English was conducted for MAU students by the British Council. Currently MAU representatives have an opportunity to participate in English language facultative courses which are held at American University of Armenia.

According to the results of surveys conducted among military students, the level of English proficiency among military students is 31%, and in case of Russian – 59% which are low indicators. On the other hand, as the analyses of surveys conducted by the Division on QA and Analyses and site-visit has shown, MAU doesn't carry out study of languages of regional countries although there is such a need.

#### ***JUDGEMENTS***

The authorities of the University in terms of international relations and cooperation are strictly limited and this process is regulated by the respective structural unit of the RA MoD. At the same time, the opportunities of overcoming problems relating international cooperation are not studied by the University yet which hinders the fulfillment of strategic objectives of the sphere of MAU internationalization and external relations.

In spite of the fact that the respective structural unit of the RA MoD coordinates internationalization related activities of the University, the provision of additional resources by MAU will foster the identification of problems relating the development and continuous improvement of external relations and internationalization, enlargement of scope of national and international collaboration as well as conduction of comparative analyses.

It is positive that MAU cooperates with local higher education institutions and international organizations for the fulfillment of educational process. At the same time the expert panel finds that the study of best practices of national and international civic and military universities and exchange of knowledge in modern methods as well as that of professional literature will promote the improvement of PAPs, continuous professional development of teaching staff and dissemination of best practice at MAU.

Although the University takes some activities directed to the improvement of foreign language proficiency, there is still a need to upgrade the level of proficiency in English and Russian (especially in case of students) languages among military students and teachers which will enable them to study modern foreign literature and will increase their involvement in internationalization



processes. There is also a need to integrate a component of study of languages of regional countries /Georgian, Azeri, Turkish, Persian/.

**CONCLUSION:** Taking into consideration the fact that MAU doesn't allocate sufficient resources to the reinforcement of internationalization and external relations, it doesn't fully fulfill its strategic objectives in this sphere yet, the level of MAU integration into RA and international higher education area is at low level, international academic and research exchange programs are missing, the mobility of teachers and students is poor, and the insufficient proficiency of English is a serious obstacle for the development of external relations and internationalization, the expert panel finds that the University doesn't yet meet the requirements of the Criterion 9.

***The compliance of the institution's institutional capacities with the requirements of criterion 9 is unsatisfactory.***

## X. INTERNAL QUALITY ASSURANCE SYSTEM

**CRITERION: The Institution has an internal quality assurance system, which promotes establishment of a quality culture and continuous improvement of all the processes of the Institution.**

### FACTS

#### **10.1 The Institution has quality assurance policies and procedures.**

One of the MAU strategic objectives is the "Investment of grounds of general quality management system at the University". The QA approaches are defined in the "MAU QA Policy" which was put into action by the decree of MAU Scientific Council in 15 September 2017. The following main six principles serve as a basis for the policy: responsibility and obligation, objectiveness, transparency, communication and cooperation, cyclic approach to quality management, publicity. QA Department carries out its activities in accordance with annual and monthly work plans the results of which are summed up in monthly and annual reports.

The position of Department of Quality Assurance and Analysis is stipulated in the management system of the University but it should be noted that the Department is still in the process of development. A number of QA mechanisms and procedures have been developed recently, however their efficiency isn't evaluated yet.

#### **10.2 The Institution allocates sufficient material, human and financial resources to manage internal quality assurance processes.**

The unit ensuring internal quality assurance of MAU was established in 2015 which was under supervision of Educational-Methodical Department. Later, in 2016, by the RA MoD order, the Division was restructured into Department under supervision of MAU Deputy Head on Educational and Scientific Affairs.

For the fulfillment of internal QA activities MAU provides human, material and financial resources. The distribution of the resources allocated to the internal QA processes is made on general bases (distribution made by the University).

The Department of QA and Analysis has three positions of civil servants – head of the Department, Main Specialist and Leading Specialist. Their obligations are stipulated in the Charter of

the Department. A separate furnished office equipped with necessary facilities is provided to the Department of QA and Analysis. At the same time it must be mentioned that there aren't clear requirements set for the positions of Head of the Department, Main Specialist and Leading Specialist.

According to the Charter of the Department of QA and Analysis, the main directions of the Department's activities aim to coordinate and ensure continuous improvement of management, organizational, analytic, methodical and consultancy, informational, inter-university cooperation processes.

If necessary, other staff members (besides main staff of the Department of QA and Analysis) are involved in MAU QA processes based on the order by the Head of MAU or by the decree of the Scientific Council.

### **10.3 The internal and external stakeholders are involved in quality assurance processes.**

According to the 4<sup>th</sup> principle – “Communication and Cooperation” set by the policy of the Department of QA and Analysis, “MAU ensures feedback with students, teachers and other stakeholders (internal and external) in QA processes, identifies their needs and takes them into consideration”.

The Department of QA and Analysis ensures MAU internal stakeholders' involvement in internal QA processes by integrating students, teachers and administrative staff in different working groups (e.g. in the development of SP, self-evaluation, evaluation of educational process, development and revision of PAPs and syllabi) as well as in surveys to evaluate their satisfaction with educational environment. As it was mentioned in the site-visit meetings, the participation of military students in meetings organized by the Department of QA and Analysis is still at low level which is conditioned by their overload.

The expert panel also noticed that the Department of QA and Analysis is willing to take steps directed to the identification and improvement of current problems existing in the University, and the Head of the University supports the Department to solve them.

As an external stakeholder, the RA MoD is involved in MAU QA processes. Hence, the main results are agreed upon the RA MoD Staff and Military Education Department and are reported to the curator of MAU – RA Deputy Minister of Defence.

However, as it was mentioned during the meetings organized for the site-visit, there isn't any responsible person for QA activities in the RA MoD Staff and Military Education Department who would tightly collaborate with QA units of military education institutions and would participate in identification and improvement of QA related issues existent in military education.

In spite of some progress in terms of investing quality culture which has been registered due to the activity of the Department of QA and Analysis, the University still needs to make some efforts to develop its quality culture in terms of revisiting QA approaches adopted by military higher education institutions.

### **10.4 The internal quality assurance system is periodically reviewed.**

The QA system of MAU is still in the phase of formulation, and evaluation tools and mechanisms are newly developed. QA processes are in different stages of PDCA cycle, in particular:

- a number of documents have been planned and put into function: MAU SP, Regulation on Conduction of Class Observation, QA policy, a number of surveys, Regulation on Assessment, guiding formats for revision of PAPs and syllabi, PAP descriptions, syllabi, chair regulations which were developed by the participation of heads of chairs and other internal stakeholders;

- the following activities have been planned, carried out and evaluated: the dynamics of state final examination results, comparative analysis between indicators of military students' final attestation examination grades and those of semester examination grades, analysis on military students' dismissal, analysis of efficiency of class observations, etc.;
- a number of processes have been improved as a result of conducted surveys, in particular, allocation of additional hours for foreign language courses, addition of lab activities, etc.;
- it is planned to increase the quantity of internship activities and to enrich resource base.

Taking into consideration the fact that the QA system in RA military higher education institutions has been invested in recent times, MAU carried out benchmarking on QA policy and procedures with RA public higher education institutions. In particular, MAU carried out comparative analysis and study of QA structural units of Yerevan State University, National Polytechnic University of Armenia, Armenian State Economic University, Armenian State Pedagogical University, etc. Besides, it participated in annual international workshops for educators conducted by the NATO consortium "Partnership for Peace" during which the international practice in the QA field was presented.

#### **10.5 The internal quality assurance system provides valid and sufficient grounds for the external quality assurance processes.**

By means of self-evaluation MAU has tried to ensure respective grounds for the processes of evaluation of internal QA. In addition, the University has launched the conduction of self-evaluation activities of different structural units based on PDCA cycle.

As a result of MAU Department of QA and Analysis and due to practice exchange with ANQA, MAU prepared its self-evaluation report according to the institutional accreditation criteria set by ANQA.

#### **10.6. The internal quality assurance system ensures the transparency of the processes at the Institution providing valid and up to date information on their quality to the internal and external stakeholders.**

The availability of information (which is not considered to be confidential) on QA activities of the University to internal and external stakeholders is ensured by means of reports, analyses and their provision to other interested parties.

Any separate mechanisms ensuring transparency of information to a wide range of society are missing which is conditioned by the fact that MAU is a military university and the major part of the information relating its activity is officially confidential.

### ***JUDGEMENTS.***

The expert panel evaluates its positive that the University makes efforts towards investment of internal QA system, its continuous improvement and formation of quality culture. The great efforts made in the latest 2 years have served as bases for the development of QA system which will further foster the implementation of regulated processes and their continuous improvement.

It is also positive that MAU provides human and material resources for the management of QA processes. At the same time MAU management staff constantly supports the implementation of QA processes, and staff members of the Department of QA and Analysis periodically participate in national and international trainings. The mentioned activities promote the development of the QA structural unit and professional progression of the staff.

It is remarkable that external stakeholders (MoD representatives) and internal stakeholders (military students, teaching staff, administrative staff) are involved in QA processes, in meetings and surveys organized by the Department of QA and Analysis. However, the scope of involvement of students and teachers needs to be enlarged which will foster the identification of shortcomings and solution of the identified problems.

Although the internal QA system and quality culture are still in the phase of development at MAU, and the PDCA cycle is not completed yet, based on carried out activities, the expert panel noticed that a number of QA processes are at different levels of PDCA cycle which will stimulate the continuous enhancement of quality of the processes, will identify the problems and will provide necessary solutions.

The expert panel also positively evaluates the fact that MAU has launched self-evaluation processes with different structural units (self-evaluation of MAU medical service) which will foster the identification and solution of problems which are existent in different structural units.

Conditioned by the peculiarities of QA system of military education, a number of discrepancies with QA requirements set for RA education field (transparency, availability of information, active involvement of stakeholders, etc.) can be observed.

**CONCLUSION:** Taking into consideration the fact that a number of documents for the regulation of internal QA activities have been developed, there is internal QA policy and procedures, MAU provides necessary material and human resources for the fulfillment of activities of the Department of QA and Analysis, its staff members regularly participate in national and international trainings, internal and external stakeholders are involved in QA activities, QA processes are at different phases of PDCA cycle, self-evaluation of different structural units of MAU has been launched, Department of QA and Analysis is recruited with motivated staff members who have achieved feasible results due to their efficient activities carried out within two years, the expert panel finds that MAU meets the requirements of the Criterion 10.

***The compliance of the institution's institutional capacities with the requirements of criterion 10 is satisfactory.***

## EVALUATION ACCORDING TO ACCREDITATION CRITERIA

CRITERION	CONCLUSION
I. Mission and Goals	Satisfactory
II. Governance and Administration	Satisfactory
III. Academic Programs	Satisfactory
IV. Students	Satisfactory
V. Teaching and Support Staff	Satisfactory
VI. Research and Development	Unsatisfactory
VII. Infrastructure and Resources	Satisfactory
VIII. Social Responsibility	Satisfactory
IX. External Relations and Internationalization	Unsatisfactory
X. Internal Quality Assurance System	Satisfactory

27 July 2018

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Hermine Grigoryan

Head of the Expert panel

## APPENDIX 1. CVS OF EXPERT PANEL MEMBERS

**Hermine Grigoryan** – in 1992 graduated from Faculty of Physics and Mathematics of Vanadzor State Pedagogical University. H. Grigoryan is a Candidate of Physical & Mathematical Sciences (2008) and Associate Professor (2011). Since 1992 she teaches at Vanadzor State University (VSU), since 2014 she is the Dean of Faculty of Physics & Mathematics of the same university. H. Grigoryan teaches courses on the following subjects: “Equations of Mathematical Physics”, “Differential Equations”, “Complex Analysis”, “Differential and Integral Accounts of Single Variable Function”, “Differential and Integral Accounts of Multivariable Function”. Herine Grigoryan’s field of interests covers problems of anisotropic plates of variable thickness.

**Alexandr Kryachko** - Radio Technician, Doctor of Technical Sciences, Professor. Since 2011 A. Kryachko is the Head of Chair on Radio-technical and Optoelectronic Systems of Saint Petersburg State University of Aerospace Instrumentation. In 2017 A. Kryachko was rewarded for his investment in the sphere of education and science in Saint Petersburg. He has 5 monographs, 7 educational manuals, 11 invention patents and more than 50 articles. Prof. Kryachko is an Academician of International Communication Academy.

**Gegham Korayan** – in 2002 graduated the BA of Faculty of Cybernetics of Armenian State University of Architecture (ASUA), in 2004 – MA degree. In 2008 G. Korayan became Candidate of Technical Sciences, in 2013 – Associate Professor. Gegham Korayan's professional activity started in 2003 by the positioning of Senior Assistant of Chair of Electronic Engineering, ASUA Faculty of Cybernetics. In 2011-2013 he was the Dean's Deputy on Scientific Affairs of the same faculty, since 2013 – Associate Professor of Chair of Electronic Engineering. Since 2017 G. Korayan is the Deputy of Head of Institute of Information & Communication Technologies and Electronics on Educational Affairs. Since 2017 he is a member of Professional Board of 038-Electrical Engineering (Ե09.01). Gegham Korayan has authored 25 scientific articles, 2 patents, 8 methodical and laboratory works.

**Avetis Gevorgyan** – In 2002-2007 studied the profession of Standardization and Certification in the Faculty of Marketing and Business Organization of Armenian State University of Economics. In 2007-2010 A. Gevorgyan had his PhD study in the RA Public Administration Academy and became Candidate of Economical Sciences. Since 2010 he is the Head of Department of Quality Assurance of Vocational Education of PARA. Avetis Gevorgyan has participated in a number of trainings and activities devoted to the sphere of quality assurance.

**Vigen Mkrtchyan** – 4<sup>th</sup> year student of Faculty of Radio Physics of Yerevan State University. V. Mkrtchyan has participated in trainings for student experts organized in the framework of ANQA “Student Voice” project.

## APPENDIX 2. SCHEDULE OF SITE-VISIT

04.06.2018 - 07.06.2018

	<b>04.06.2018</b>	<i>Start</i>	<i>End</i>	<i>Duration</i>
1.	Meeting with MAU Head	09:30	10:20	50 minutes
2.	Meeting with Deputy Heads of MAU	10:30	11:30	60 minutes
3.	Meeting with members of self-evaluation working group	11:40	12:20	40 minutes
4.	Break, session of expert panel	12:30	13:30	60 minutes
5.	Meeting with MoD representatives coordinating MAU activity	13:40	14:40	60 minutes
6.	Meeting with heads of faculties	14:50	15:40	50 minutes
7.	Meeting with representatives of MAU alumni	15:50	16:30	40 minutes
8.	Closed session of expert panel and review of documents	16:40	18:00	80 minutes

	<b>05.06.2018</b>	<i>Start</i>	<i>End</i>	<i>Duration</i>
1.	Meeting with heads of chairs (including those responsible for three PAPs presented in self-evaluation report)	09:30	10:30	60 minutes
2.	Meeting with teaching staff members (including those implementing three PAPs) (10-12 teachers)	10:40	11:40	60 minutes
3.	Visit to faculties and review of documents	11:50	12:50	60 minutes
4.	Break, session of expert panel	13:00	14:00	60 minutes
5.	Visit to chairs and review of documents	14:10	15:10	60 minutes
6.	Meeting with staff of MAU Department of Quality Assurance and Analysis	15:20	16:20	60 minutes
7.	Closed session of expert panel and review of documents	16:30	18:00	90 minutes

	<b>06.06.2018</b>	<i>Start</i>	<i>End</i>	<i>Duration</i>
1.	Meeting with members of Sergeant Council	9:30	10:30	60 minutes
2.	Meeting with military students (studying 4-year or 5-year programs) (10-12 students)	10:40	11:40	60 minutes
3.	Meeting with military students (studying short-term programs) (10-12 students)	11:50	12:50	60 minutes
4.	Break, session of expert panel	13:00	13:30	30 minutes
5.	Observation of resources, visit to military unit, practical class observation	13:40	18:00	260 minutes

	<b>07.06.2018</b>	<i>Start</i>	<i>End</i>	<i>Duration</i>
1.	Meetings with staff members chosen by expert panel	9:30	10:30	60 minutes
2.	Meetings in MAU structural units	10:40	12:10	90 minutes
3.	Open meeting with expert panel	12:20	12:50	30 minutes
4.	Break, session of expert panel	13:00	14:00	60 minutes
5.	Closed session of expert panel and review of documents	14:10	16:50	160 minutes
6.	Summative meeting with MAU Head	17:00	17:30	30 minutes



### APPENDIX 3. LIST OF OBSERVED DOCUMENTS

N	Name of Document	Criterion
1	Documents on analysis of needs and feedback	1
2	Characteristics received from RA MoD and AF	1
3	Results of check-ups of Chief Military Inspection	1
4	Annual reports of MAU Head	1
5	Annual and monthly reports of structural units	1
6	MAU Head's report submitted to RA MoD Collegial sessions	1
7	Job descriptions/passports of MAU governing bodies	2
8	Register of MAU Sergeant Council sessions	2
9	Samples of MAU short-term plans	2
10	Samples of MAU mid-term plans	2
11	Analyses / analyses of external factors / made by MAU	2
12	Assignments based on MoD audits	2
13	Reports of MAU final examinations	2
14	Letter on submission of content analysis of survey conducted among MAU teaching staff	2
15	Letter on submission of content analysis of survey conducted among MAU military students	2
16	State educational standards of MAU professions	3
17	Reports of results of monitoring on revision of MAU courses and programs, conducted by Department of QA and Analysis	3
18	Samples of MAU Diploma Supplements	3
19	Command of Head of RA AF General Staff on improvement of PAPs (96/ҚС 02.10.2014)	3
20	Standards set for monitoring of military unit and education institution, improvement plans	3
21	Analysis of distribution of MAU applicants in regions (2007-2017)	4
22	Registers of 1 <sup>st</sup> year military students	4
23	Analysis of dynamics of number of dismissed MAU students in years (from 2010-2011 to 2016-2017)	4
24	Analysis of distribution of MAU applicants in regions (2007-2017)	4
25	Table presenting the number of MAU female students in professions and academic years	4
26	Projects of facultative subjects groups of MAU approved by MAU Faculty of General Education Subjects	4
27	Certificates and certificates of Honor for winning prizes Order of page 44	4
28	Grounds of military students' business trips abroad	4

29	Register of records of Faculty Council's sessions	4
30	Sample of questionnaire in a given profession developed by MAU teacher	5
31	Qualification descriptions of MAU Officers Job descriptions	5
32	Reports on MAU state final exams by President of Commission	5
33	Packages of MAU classroom observation analyses and results	5
34	Analysis on class observations by Department of QA and Analysis	5
35	Packages of MAU class observation analyses and results by the Head of chair and Methodist of Educational-Methodical Department	5
36	Quantitative and qualitative analyses on progression of MAU military students and attendees	5
37	Reports of MAU state final exams submitted to the Deputy Minister of Defence	5
38	Analyses on MAU state exams by Department of QA and Analysis	5
39	Documents relating methodical courses organized by RA MoD in the frame of cooperation with NATO	5
40	Perspective plans on trainings and qualification enhancement of MAU teaching staff	5
41	Methodical courses held by RA MoD in the frame of cooperation with NATO	5
42	Reports and grounds of qualification enhancement courses for MAU teaching staff	5
43	Plan of preparation of teaching for MAU freshman teachers in accordance with approved format	5
44	Annual plans of scientific-educational activities for teachers, chairs and faculties (2017-2018 academic year)	6
45	Reports of MAU faculties	6
46	Manuals published as a result of scientific-technical conferences of MAU	6
47	Grounds of participation of MAU staff members in workshops and scientific-technical conferences held by other universities	6
48	Annual plans of Officer-Methodist of Educational-Methodical Department	6
49	Package of peer-reviews of MAU teachers' educational manuals	6
50	MAU Head's report submitted to Chief Military Inspection (13.11.2017)	7
51	Semester reports of faculty heads	8
52	Annual reports of MAU Deputy Head on Personnel Affairs	8
53	Annual reports of Head of MAU Club	8
54	Registers of records of MAU Parental Council	8
55	Reports of MAU teachers' business trips	9
56	Reports of MAU administrative staff's business trips	9
57	Package of staff's certificates of foreign language courses	9
58	Reports on participation in workshops submitted to MAU Head	9
59	Package of staff's certificates of foreign language courses	9
60	Annual and monthly reports of MAU Department of QA and Analysis	10
61	Annual plans of Head of MAU Department of QA and Analysis	10

62	Monthly plans of Head of MAU Department of QA and Analysis	10
63	Analysis on dynamics of admission results made by MAU Department of QA and Analysis	10
64	Reports of MAU educational-methodical meetings by Head of MAU Department of QA and Analysis	10
65	Comparative analysis of MAU current and state final examination grades made by MAU Department of QA and Analysis	10

## APPENDIX 4. OBSERVED RESOURCES

1. Classrooms
2. Deans' Offices
3. Chairs
4. Structural Units
5. Laboratories
6. Military equipments
7. Arzni airport
8. Conference Hall
9. Computer classrooms
10. Canteen
11. Medical Unit
12. Barracks
13. Library
14. Reading Hall

APPENDIX 5.  
MAU ORGANIZATIONAL STRUCTURE



## APPENDIX 6. LIST OF ABBREVIATIONS

RA – Republic of Armenia  
AF – Armed Forces  
MAU - Military Aviation University  
MAI - Military Aviation Institute  
NQF – National Qualifications Framework  
ENQA - European National Qualifications Framework  
SP – Strategic Plan  
SC - Scientific Council  
MoD – Ministry of Defence  
MoES – Ministry of Education and Science  
EHEA – European Higher Education Area  
PDCA – Plan-do-check-act  
PAP – Professional Academic Program  
YSU- Yerevan State University  
AUA - American University of Armenia  
ASUE - Armenian State University of Economics  
NPUA – National Polytechnic University of Armenia  
ASPU – Armenian State Pedagogical University  
NUACA - National University of Architecture and Construction of Armenia  
QA – Quality Assurance  
QAA - Quality Assurance and Analysis  
UAV – Unnamed Aerial Vehicle  
ANQA - National Center for Professional Education Quality Assurance Foundation  
AAD - Anti-aircraft Defence  
HRM - Human Resource Management  
ECTS - European Credit and Transfer system  
ABET - Accreditation Board for Engineering and Technology  
ESG - European Standards and Guidelines  
CSTO - Collective Security Treaty Organization  
NATO - North Atlantic Treaty Organization  
HAES - Hygiene and Anti-Epidemic Service