Doc. 300.1.2

Higher Education Institution's Response

Date: June 12, 2023

- **Higher Education Institution:** Cosmos Open University
- **Town:** Nicosia
- **Programme of study**
  Name (Duration, ECTS, Cycle) 18 months, 90 ECTS

  In Greek:

  Ιατρική Φυσική και Διαγνωστική Απεικόνιση

  In English:

  Medical Physics and Diagnostic Imaging
- **Language(s) of instruction:** English
- **Programme's status:** New
- **Concentrations (if any):**

  In Greek: Concentrations
  In English: Concentrations

The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the "Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws" of 2015 to 2021 [L.136(I)/2015 – L.132(I)/2021].

A. Guidelines on content and structure of the report

- *The Higher Education Institution (HEI) based on the External Evaluation Committee's (EEC's) evaluation report (Doc.300.1.1 or 300.1.1/1 or 300.1.1/2 or 300.1.1/3 or 300.1.1/4) must justify whether actions have been taken in improving the quality of the programme of study in each assessment area. The answers' documentation should be brief and accurate and supported by the relevant documentation. Referral to annexes should be made only when necessary.*

- *In particular, under each assessment area and by using the 2nd column of each table, the HEI must respond on the following:*

  - *the areas of improvement and recommendations of the EEC*
  - *the conclusions and final remarks noted by the EEC*

- *The institution should respond to the EEC comments, in the designated area next each comment. The comments of the EEC should be copied from the EEC report **without any interference** in the content.*

- *In case of annexes, those should be attached and sent on separate document(s). Each document should be in *.pdf format and named as annex1, annex2, etc.*

Responses to the External Evaluation Report

We would like to thank all the members of the External Evaluation Committee for the time devoted to us and our MSc Program in "Medical Physics and Diagnostic Imaging". We would also like to thank them for the interesting comments raised regarding the improvement of the offered postgraduate program.

Please find below our responses to the comments raised on areas of improvement and recommendations.

A. Introduction

This part includes basic information regarding the onsite visit.

Comment 1 by EEC: The onsite visit included the introduction to a large host of individuals who demonstrated their strong support for this new proposed university. Over two days we also met with leaders of the proposed university and program leads, teaching staff, and professional support staff.

Clarification by Cosmos: We would like to add to this positive comment of the EEC, by emphasizing that ''The large host of individuals who demonstrated their strong support for this new proposed university'' are Members of its Governing Board and of its International Advisory Board, originating from several international research centers, high-ranked members of scientific organizations, directors of medical centers, policy makers on environmental and economic reforms, established technocrats, business CEOs, and reputable academic people from both distance learning and conventional institutions of higher education, who actually committed themselves to the project of founding this new university. All have been properly introduced to the Members of the EEC in the premises of the Institution during the Accreditation process.

More specifically, they are established members of the international academic community, with well-known track records in their disciplines/areas of specialization, directors/CEOs of established Medical Centers providing diagnostic and therapeutic services to patients, well-known political personalities with technocratic knowledge in crucial areas related to the current and future study programs of our Institution, business founders and CEOs of international companies, and personalities who formulate international and public policies in a series of subjects relevant to the programs of our Institution. They committed themselves to providing their services and collaboration, helping to develop the new Institution so that it becomes one of the best distance learning universities in the geographic region of its operation.

In addition, most of the members of the International Advisory Board have long-standing, since several decades, professional collaborations with the founders of the Institution and the Members of its Governing Board, as well as participation in common projects which involve the training of students, their introduction to complicated infrastructure/instrumentation and their participation in Schools, Conferences, Internships, and other projects. Both the Members of the Governing Board, and especially so the Members of the International Advisory Board, constitute ambassadors of the new proposed University to society; they are our esteemed links to society, “hearing” its demands and needs, and reflecting to the society the University's values and ideals.

For a very brief introduction on the Who is Who of the members of our International Advisory and Governing Boards (by no means CVs with their projects, achievements, and publications), please refer to the presentation given to the EEC by the President of the Governing Board, Prof. Panos Razis (**the corresponding part attached for quick reference**).

1. Study programme and study programme's design and development
(ESG 1.1, 1.2, 1.7, 1.8, 1.9)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
Findings - Comment 1.1 The information intended for the public is provided under the description of the programme and the study guides for the students, but it is not currently publicly available as the webpage of the institution is not yet available.	**Response:** Our website has been developed but not published, as this was "restricted" to the public due to specific rules of the CYQAA. We have created a special account for the EEC committee to visit the website and all credentials and URLs were sent in a separate email for security issues.	Choose level of compliance:
Areas of improvement and recommendations - Comment 1.2: The internal regulations for Quality Assurance of the program are not tailored to meet the requirements of the specific programme on Medical Physics and Diagnostic Imaging. They are formulated in generic terms that would apply to both institutions and programs without any particular reference to the current program under evaluation. The issues specific to the program on Medical Physics and Diagnostic Imaging is of key importance for running a program that is supposed to include theoretical knowledge on the medical applications of ionising and non-ionising radiation as well as practical activities that should be partially provided and fully supported by clinical partners should have been included in the policy of quality assurance. It is, therefore, strongly recommended that a dedicated quality assurance and quality control program is developed and implemented for teaching and practical activities at the different clinical partners are expected to participate in the education and training of the students.	**Response:** The internal regulations for Quality Assurance of the Institution are designed to meet all the structural components and aspects of the study programmes offered by the Institution, whether describing theoretical, experimental, laboratorial, interactive, or colloquial activities of the students – of individual or group nature. They meet all the requirements of the specific Programme on Medical Physics and Diagnostic Imaging. All professionally supervised activities of the students in group tasks will be taking place under the Institution's regulations, guaranteeing the Quality Assurance for the given Programme. The students attending the Programme will acquire all the theoretical knowledge needed through the courses themselves and conduct all their practical or experimental activities required for the master's degree. The Laboratory course in the Programme, with 44 hours of experimental exercises, will be conducted during the summer semester of the Programme in a dedicated laboratory in Cyprus via block teaching mode for 2 intensive weeks per group. The above are specialized requirements which correspond to the contents of the Programme themselves, as included in the study guides, and cannot be the contents of the policy document on Quality Assurance of the Institution. Otherwise, for each study programme the Institution should come up with a different Quality Assurance policy document, which is not realistic to be expected, while it is naturally expected to apply the proper control measures for the correct implementation of any given programme; after all, such measures are up to the specific study program's responsibilities, in order to fulfill their corresponding learning outcomes. The EEC actually recommended on this point 'quality control' and not yet another quality assurance policy documentation.	Choose level of compliance:

Areas of improvement and recommendations - Comment 1.3: Regarding the programme design, the input of the national and international authorities regulating the professional education of the medical physicists is missing and it must be considered. The level of qualification provided at the end the MSc programme to the graduates relative to the qualifications required in Cyprus and/or internationally for being employed as medical physicists in training towards becoming medical physics experts must be clearly specified at the design phase of the programme with input from the representatives of the authorities regulating the qualifications of the medical physicists. Also missing is input of the representative of the national authority for radiation protection. The student input on the programme design is not evident.	**Response:** As regards with the input of the national and international authorities regulating the professional education of the medical physicists, their input was highly considered in the designing of the structure of the Medical Physics and Diagnostic Imaging Programme. Despite the fact that most international master's programmes in Medical Physics differ from each other by a whole one third (1/3) of their courses, we did use, among others, the latest joint recommendations of the European Association of Medical Physics (EANM) and the European Federation of Organizations for Medical Physics (EFOMP, where the national representative of Cyprus participates) to design the contents of the Cosmos Medical Physics and Diagnostic Imaging Programme **[Reference attached: Physica Medica (2013) 29, 139-162]**. Our Programme contains courses in the subfields proposed, namely: Interactions of Radiation with Matter, Radiation Oncology, Medical Imaging, Nuclear Medicine, Radiotherapy, Medical Radiation Dosimetry and Radiation Protection, Imaging with Ionizing and Non-ionizing Radiation, Statistical Methods, Research Methodology and master's Thesis Dissertation. In addition, the full Syllabi of our courses were sent to the Cyprus Council Registering Physicists in Medicine, expecting their comments. We are also in contact with the Cyprus national authority for radiation protection.	Choose level of compliance:

2. Student – centred learning, teaching and assessment
(ESG 1.3)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
Areas of improvement and recommendations – Comment 2.1 The distance methodology is not particularly suited for the topics included in this specific programme of study. Thus, the-self-study with help of e-learning tools and resources must be complemented by a thoroughly designed plan for the interaction with the teaching staff. This plan is currently presented in broad terms such as including regular teleconferences. A program specific plan to safeguard and assess the interactions among students, and between students and teaching staff is not presented/developed.	**Response:** A thoroughly designed plan for the interaction of the students with the teaching staff and among themselves is foreseen in all courses of the Programme. All courses contain the necessary number of interactive processes (διαδραστικές διεργασίες) between students and professors and students with students, with the formulation of small groups of students interacting with the faculty and the adjunct professors in theoretical and experimental aspects of medical physics, laboratory exercises, reports conducted on relevant research topics, online discussions, Wikipedia formulations, data analysis, as well as self-assessment activities. The teleconferences take place on the platform with the participation of both small groups of students, as well as with the whole classes of students, thus providing the right blending of interactive activities.	Choose level of compliance:
Areas of improvement and recommendations – Comment 2.2 There is also no evidence on a plan for training, guidance and support provided to the students focusing on interaction and the specificities of e-learning except for the schedule of a three days seminar on Open and Distance Education provided upon request of the EEC. While the former might be addressed at institutional level, there would still be lacking documentation on the plans for ensuring the student-centred learning process considering the intrinsic applied character of the education in medical physics that would involve the interaction with many external tutors working only part-time for the university.	**Response:** Regarding training, guidance and support provided to the students on the specificities of e-learning, a plan was presented to the EEC on the organization of introductory material for the students, during the first two weeks of their entering semester, as preparatory for the system of e-learning implemented by the Institution. All the above measures (also see response on Comment 2.1) are designed to constitute real student-centered teaching methodology. As evidence, the sample course on Research Methodology, with significant such interactions was proposed to be presented to the EEC, but they did not manage to include it in their deliberations.	Choose level of compliance:
Areas of improvement and recommendations – Comment 2.3 Regarding the practical training, the current description of the programme does not allow for a full assessment of the possibility to meet the learning outcomes as the	**Response:** Through the highly interactive nature of Medical Physics, with the participation of many people from the academia, blended with several practitioners and experts in the field, the applied character of the education in the field of Medical Physics is established. We disagree that the degree of involvement of the clinical partners is insufficient, as there are already several experts (see pre-contracts presented to the	Choose level of compliance:

description of the degree of involvement of the clinical partners is insufficient. Each of the course descriptions for the courses in the programme includes real-life training among the teaching methods but fails to provide information regarding the extent of this training, the form in which it would be conducted or the personnel to be allocated for supervising the students during the clinical practice. This is a critical failure in the submission for this programme. The study guides include the presentation of course material, part of the formative assessment on weekly bases, but the information regarding other students' activities concerning the practical part is scarce if not entirely missing. The number of teleconferences and the time when they will take place is indicated per course, but the other interactive activities such as simulations, problem solving exercises, etc, are insufficiently described. There are also no indications about the self-assessment exercises and self-correction guide. The issues above mentioned must be addressed.	EEC) interested to work as adjunct professors, even before any posts' announcements could be made, as Cosmos has first to receive its Institutional Accreditation before it can announce and fill its posts hirings. In fact, there will be more than sufficient personnel expected to operate the given master's Programme. This aspect is far from being a critical failure of the Programme. The information regarding students' activities concerning the practical part (lab exercises, data processing, protocols reporting etc.) is included in the corresponding study guides of the Programme which were available to the EEC. The Lab course is going to be conducted in the Summer Semester of the Programme and amounts to 44 hours of laboratory exercises. All interactive activities are sufficiently described. There are also many self-assessment exercises escorted by self-corrections to be posted on the Institution's relevant website upon termination of the allocated time to the students for solving the corresponding exercises.	

3. Teaching staff
(ESG 1.5)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
Findings - Comment 3.1: There are some inconsistencies to be pointed out: 1. Table 3 indicates Prof. Peter Adzic as teacher in the MPD501 course, while Annex 2 containing the course descriptions indicates Prof. Panos Razis as teacher in that course. 2. Table 3 indicates Dr. Panayiotis Hadjitheodorou as teacher in the MPD506 course, while Annex 2 containing the course descriptions indicates Prof. Demetris Andreopoulos as teacher in that course. The CV of Prof. Demetris Andreopoulos is not provided. 3. Table 3 indicates Dr. Jehad Mousa as teacher in the MPD508 course, while Annex 2 containing the course descriptions indicates Prof. Spyros Tzamarias as teacher in that course.	**Response:** The entries in Table 3, concerning the teachers of the courses in the Programme, were filled according to the best scientific expertise of the academic staff and adjunct professors who already expressed their interest to work for/with our Institution by signing pre-contracts even before its Institutional Accreditation. This should normally not be expected by the Institution. The assignment of the courses is therefore certainly not finalized at this stage, considering that the Institution, upon its accreditation, will come out with an announcement searching for more faculty members within the geographic area of its operation. One has to also consider that most of the established members of the faculty (if not all) can certainly teach any course of the master's level Programme of study. Therefore, if two or more professors are listed to teach the same course is quite natural, considering that the Institution can be expected to formulate more than one class (of 25-30 students) for any given course of the Programme. This answer addresses the issues 1., 2., and 3., posed by the EEC.	Choose level of compliance:
Findings - Comment 3.2: The onsite visit and the dialog with the potential teachers revealed that the part-time teachers will be able to dedicate rather limited time to the program. An estimation of the average amount of time each of them plans to allocate for teaching, tutoring, supervising, grading and being involved in other activities in the program was requested as additional information but at the time of writing this evaluation this information is still pending. The teaching staff for the Medical Physics and Diagnostic Imaging programme is planned to consist of nine people, 3 employed full time and the rest of 6 employed part time, as described in Table 4 in the application, which is insufficient	**Response:** It is also obvious that the professional load of the adjunct professors who would work on a part-time basis for our Institution will be considered in the assignment of the courses. Nominally, it is expected that most adjunct professors working only part-time for the Institution will be assigned one class of students in a course. Nowhere it is said to the EEC that the teaching staff for the Medical Physics and Diagnostic Imaging Programme is planned to consist of nine people, 3 employed full time and the rest 6 employed part time, as more posts are expected to be filled only after the Institutional Accreditation. Therefore, considering the status of the Institution when the Programme application and Annex 2 (Syllabi of courses) were filled, there is no inconsistency, as the number of teaching staff in the Programme is not yet finalized. Any Institution cannot be expected to fill its posts/positions before it is legitimately recognized! As mentioned earlier, the assignment of the courses is certainly not finalized at this stage, considering that the Institution, upon its accreditation, will come out with an	Choose level of compliance:

given the complexity of the subject and the amount of work required for tutoring the students. The amount of part time employment is not specified. Annex 8 presenting the feasibility study specifies the number of academic professors as 2 (for period 2023-2026) and the number of visiting professors as 18 for 2023- 2024 and 24 for 2025-2026. It is not clear how should this potential inconsistency between the number of teaching staff given in the application and in Annex 8 should be interpreted.	announcement searching for more faculty members (faculty staff and adjunct professors/tutors).	
Areas of improvement and recommendations – Comment 3.3: The teaching staff for the Medical Physics and Diagnostic Imaging programme is planned to consist of nine people, 3 employed full time and the rest of 6 employed part time, as described in Table 4 in the application. The amount of part time employment is not specified. Annex 8 presenting the feasibility study specifies the number of academic professors as 2 (for period 2023-2026) and the number of visiting professors as 18 for 2023-2024 and 24 for 2025- 2026. As stated above, it is not clear how should this inconsistency should be interpreted and therefore the issue must be clarified.	**Response:** As found for Comment 3.2 above: Nowhere it is said to the EEC that the teaching staff for the Medical Physics and Diagnostic Imaging Programme is planned to consist of nine people, 3 employed full time and the rest 6 employed part time, as more posts are expected to be filled only after the Institutional Accreditation. Therefore, considering the status of the Institution when the Programme application and Annex 2 (Syllabi of courses) were filled, there is no inconsistency, as the number of teaching staff in the Programme is not yet finalized. Any Institution cannot be expected to fill its posts/positions before it is legitimately recognized!	Choose level of compliance:
Areas of improvement and recommendations – Comment 3.4: The application and the onsite visit did not reveal how does the institution plans to ensure the competence of the teaching staff. Currently, it appears as the teaching staff was recruited based on individually expressed availability to be involved in teaching in this programme. Furthermore, for the teachers planned to be involved in the courses with clinically applied character, the recruitment appears to be based on the proximity of their	**Response:** The teaching staff was recruited based on their expertise, to build up the specific Programme of studies in Medical Physics and Diagnostic Imaging and to provide their teaching knowledge and skills in this Programme. For the teachers planned to be involved in the courses with clinically applied character, the recruitment is very legitimate to be based on the collaborating clinics assigned (based on their reputation and quality to support the Programme). Proximity is only an issue once the origin of the students attending the Programme becomes known, when other reputable clinics would be preferred for particular classes of students based on their countries of origin. For an international university, for the courses with clinically applied character it is not proximity a decisive factor, but the	Choose level of compliance:

current place of employment, namely the clinics planned to support the programme to Nicosia. Considering the fact that the programme is planned to be run within an open university, the proximity should not be regarded as a decisive factor for the selection of teachers, although it might facilitate the control and the assurance of the quality of the teaching activities to take place at the clinics.	employment of qualified personnel from the specific clinics where the students are assigned to do their training, as they are the experts entrusted to use their own facilities, instrumentation, and treatment protocols. These are the factors that essentially facilitate the control and assure the quality of the teaching activities related to the clinics.	
Areas of improvement and recommendations – Comment 3.5: There is limited information, if any, regarding the pedagogical qualifications of the teaching staff recruited from outside academia. Thus, it is not possible to assess the qualifications in relation to the possibility to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of teaching and learning. No plan for their pedagogical training and development is included either. The description of the training, guidance and support planned to be provided to the teaching staff focusing on interaction and the specificities of e-learning is also missing.	**Response:** With respect to the pedagogical qualifications of the teaching staff recruited from outside academia, one should first consider that all the potential members of the teaching staff (existing and additional to be hired by the Institution) are holders of relevant PhD degrees and/or experts in the clinical/technological areas of Medical Physics, Diagnosis and Therapy treatment. Many of them were chosen and teach relevant courses in other recognized universities. The teaching activities, in particular the practical ones, are adequately described in the study guides of the courses. Our Institution presented its plan to the EEC for the teaching staff's pedagogical training and support in the specificities of e-learning, as well as for their future career development. Such information on the training, development, guidance, and support of the teaching staff of our Institution, can be found in part 3 of Section F on Quality Assurance (pages 73-76), in our application file for the Institutional Accreditation of Cosmos Open University and in the section describing the Career Office. With the answers provided above, we believe that the issues with respect to the numbers and assignment of the teaching staff, as well as the planned recruitment and support to facilitate the smooth operation of the Programme, are fully clarified.	Choose level of compliance:

4. Student admission, progression, recognition and certification
(ESG 1.4)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
Findings – Comment 4.1: In addition, the application presents the main target of the programme as BSc and MSc graduates in Physics, or equivalent, listing graduates of pure and applied sciences, engineering, medicine and information technology. It is not evident how a degree in medicine could be considered equivalent to a degree in physics.	**Response:** Certainly, a degree in medicine could not be considered as 'Corresponding' to a degree in physics (the word 'Equivalent' used by the EEC means something different in the legal sense in Cyprus – see the legislation of KYSATS, the legal organization of Cyprus for accreditation of foreign degrees). For the purposes of the master's degree in medical physics, however, the students, originating mostly from bachelor's degrees in physics, chemistry, biology, engineering, computer science and medicine, have already attended some basic physics course. Thus, they were exposed to the basic physics principles and the general knowledge of the physics laws. Nevertheless, the nature of the first courses of the Medical Physics and Diagnostic Imaging Programme is designed so that the students enrolled learn from scratch the basic mechanisms of interactions of particles with matter and the radiation/instrumentation used for the diagnosis and treatment of patients. In addition, the study Programme is organized in such a way so that additional tutorials can take place, if needed, to guarantee that this physics knowledge be acquired by all students to strengthen their knowledge in the Programme. This knowledge is part of specific courses of the Programme and not a ''vague request'' that could be examined through a non-obligatory initial interview.	Choose level of compliance:
Findings – Comment 4.2: The regulations regarding student admission are described. One of the steps before the admission is a personal online interview with the Admission Committee. Not all the candidates, however, will be called for this interview. There is no mention of the conditions that would qualify the candidates for the interview, nor of those that would ensure the direct admission without the interview. The assessment criteria of the student eligibility based on the interview are not specified either.	**Response:** As an open university, Cosmos' assessment criteria of a student's eligibility for the specific Programme will be a bachelor's degree and some previous attendance of undergraduate physics courses. The selection criteria for any interviews for potential students that do not directly fulfill the eligibility standards and conditions for direct acceptance in the Programme will be clearly described in the corresponding announcement for filing applications to enroll in the Programme.	Choose level of compliance:
Areas of improvement and recommendations - Comment 4.3: The admission requirements for the study programme are formulated in rather vague terms as "equivalent to a BSc or MSc degree in physics". While a BSc or MSc degree in	**Response:** Cosmos' assessment criteria of a student's eligibility for the specific Programme will be a bachelor's degree and some previous attendance of undergraduate physics courses. For specific fields belonging to natural sciences, engineering, computer science and medicine the latter criterion is met as their graduates have been exposed to undergraduate physics. The listed examples for	Choose level of compliance:

physics would indeed enable the students to follow the programme, it is not clear what should be considered as equivalent to that. The listed examples for equivalent educational backgrounds are debatable. A clear formulation of the minimum requirements should therefore be included. In addition, the selection criteria for the interview for students not directly fulfilling the eligibility standards as well as the conditions for passing the interview should also be clearly described.	equivalent educational backgrounds are not debatable, as pure and applied sciences, medicine and engineering sciences are exposed to introductory physics and the laws of physics, so their graduates are capable to follow the courses of the Programme that cover sufficiently all the physics material needed. As far as the selection criteria for any interviews for potential students that do not directly fulfill the eligibility standards and conditions for direct acceptance in the Programme is concerned, these will be clearly described in the corresponding announcement for filing applications to enroll in the Programme.	
Areas of improvement and recommendations - Comment 4.4: As the program is addressed to students from any country, with different educational systems but also different systems for qualifying professional in the medical radiation physics and diagnostic radiology fields, there should be a procedure in place for recognising not only prior formal learning but also informal learning through work experience.	**Response:** The EEC suggests that there should be a procedure in place for recognising not only prior formal learning, but also informal learning through work experience in the process of students' admission at the University. In the framework of lifelong learning, which is an important element of open and distance learning education, the elements of informal and non-formal learning are considered as important as the element of formal learning, which is mainly implemented through the operation of primary and secondary schools, as well as institutions of higher education. Cosmos Open University, seated in Cyprus, adopts the proposed National Action Plan of Cyprus for the validation of non-formal and informal learning. The National Action Plan contains elements on strategic targeting, principles, conditions, governance, and whatever is needed to operate a comprehensive non-formal and informal learning validation mechanism in Cyprus. It was formulated as part of the project "Preparation of a National Action Plan for the Establishment of Non-Formal and Informal Learning Validation Mechanisms", which is part of a larger project containing a pilot implementation of the non-formal and informal learning validation mechanism in Cyprus, in the fields of Volunteerism, Youth and Adult Education, under the Operational Program "Employment, Human Resources and Social Cohesion" 2014-2020. The pilot implementation is expected to be completed on the 31/12/2023. It is also well known that the National Qualifications Framework (NQF) includes all levels and types of qualifications from all subsystems of education and training, including non-formal learning. The NQF's main objective is to classify qualifications according to predefined levels of learning outcomes. The NQF will support recognition and validation of qualifications, enable progression and mobility, promote lifelong learning (by certifying learning	Choose level of compliance:

	outcomes acquired outside formal education), improve transparency, quality, and relevance of qualifications, and strengthen links with the labour market. However, the Cyprus NQF is not yet in operation. It will be established at the Ministry of Education, Culture and Youth as an in-service department and will be implemented gradually. New legislation on the operation of the NQF is considered necessary in Cyprus. One important policy objective is also to reinforce vocational education and training (VET) at secondary, post-secondary and tertiary-higher education levels. Now, concerning higher education in the European Region, the Council of Europe, in co-operation with UNESCO, drafted the Convention on the Recognition of Qualifications in the European Region, referred to as the "Lisbon Recognition Convention" (Lisbon 1997). It is the main legal instrument on the recognition of Qualifications in Europe, ratified today by more than 50 states, including Cyprus (21/11/2001). It promotes fair recognition of Academic Qualifications. In view of all the above, the Cosmos Open University would like to maintain compliance with the Lisbon Recognition Convention, waiting at the same time for Cyprus to implement all policies and measures with respect to NQF and non-formal and informal learning validation mechanisms. For as long as this might need to take place, we are required to comply with the instructions and recommendations of CYQAA according to the existing Cyprus legislation on foreign degrees' recognition (see KYSATS) and the law on the operation of Private Universities. This excludes for the moment informal and non-formal education from being considered in the entrance criteria for our university.	
Areas of improvement and recommendations - Comment 4.5: The learning outcomes, however, are not realistic given the duration, the content, and the learning methodology to be employed in the programme. The certificate/degree proposed will not reflect the context, level, content and status of studies that are pursued in a conventional MSc degree in Medical Physics and Diagnostic Imaging. The latter involves the completion of a programme at a high academic level complemented by practical activities and training. This will not be provided in the proposed programme.	**Response:** According to the methodology followed to design the duration, contents, and learning outcomes of the Programme, which are in direct correspondence to the recommendations of the European Association of Medical Physics (EANM) and the European Federation of Organizations for Medical Physics (EFOMP), the master's degree reflects the context, level, content, and status of studies pursued in a conventional MSc degrees in Medical Physics and Diagnostic Imaging. It does involve the completion of a programme at a high academic level (grounded on the great expertise and experience of the faculty to be teaching the courses), complemented by the required practical activities and training (grounded on the laboratory exercises, of 44 hours duration offered during the Summer Semester in Cyprus and the practical tasks by our reputable clinical partners providing the required training).	Choose level of compliance:

	Therefore, based on what evidence does the EEC claim that the Programme proposed by Cosmos is not equivalent to the level of a medical radiation physics degree?	

5. Learning resources and student support
(ESG 1.6)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
Findings - Comment 5.1: First of all, it should be mentioned that the university and its programmes are in a planning stage, so we did not have the opportunity to speak to students, nor to study the actual implemented e-learning courses within the e-learning systems.	**Response:** As the specific Programme must be first accredited (based on its contents, quality specifications of its faculty staff, services provided to meet its learning outcomes), and then be able to accept students, it is quite natural that the EEC could not have taken the opportunity to speak to students.	Choose level of compliance:
Findings – Comment 5.2: The planned teaching and learning resources must fit the teaching and learning model of the university.	**Response:** The planned teaching and learning resources of the Institution are based on state-of-the-art technological platforms and software, and the mixed pedagogical methodology is imposed by the CYQAA. These resources do fit very nicely the teaching and learning model of the Institution. The actual number of students to be accepted in the specific Programme will be in direct compatibility to the number of clinical partner institutions that will support the implementation of the study Programme, based on mutually signed Memoranda of Understanding and/or Protocols of Collaboration.	Choose level of compliance:
Findings – Comment 5.3: The actors in the teaching-learning process will be supported by the Distance Education Unit, supported by the Pedagogical Planning Unit of Cosmos U, that acts under the umbrella of the Internal Evaluation Committee.	**Response:** According to the findings of the EEC, 'The actors in the teaching-learning process will be supported by the Distance Education Unit, supported by the Pedagogical Planning Unit of Cosmos U, that acts under the umbrella of the Internal Evaluation Committee'. Therefore, despite what the EEC communicated to our Institution for the Institutional Accreditation Cosmos does have a Pedagogical Planning Committee supporting Distance Education.	
Areas of improvement and recommendations - Comment 5.4: The e-learning facilities are still in development and should be ready and tested before October 2023: the intended launch date of the programme. According to the information provided during the meetings, this seems not feasible. The programme can only start when the ICT facilities are well established, secured, and have run through comprehensive technical and functional testing. The latter with actual users.	**Response:** Nowhere It was said that the specific Programme will start operating in October 2023, but only when everything is ready, tested and the Programme is accredited, offering the quality academic and administrative services documented in our corresponding applications. We understand that the whole accreditation process got delayed in Cyprus, due to the number of pending programs from several universities waiting to be accredited, delayed by the Covid19 pandemic. As far as our Institution's ICT facilities are concerned, they are well established, secured, and able to run through comprehensive technical and functional testing.	Choose level of compliance:

Areas of improvement and recommendations - Comment 5.5: The pedagogical model as presented is underdeveloped and actually not a pedagogical model. The green box in the middle is where the model should be described. This has been discussed during the meetings. In its current state it does not give any guidance to course developers how to use digital means to attain certain categories of learning outcomes for specific learners/groups.	**Response:** The pedagogical model, as presented, is actually defined by the instructions of CYQAA. It is a mixed model, based on several interactive processes, and certainly not underdeveloped; it gives guidance to course developers how to use digital means to attain certain categories of learning outcomes, and it is implemented according to the nature of the Distance Learning of our Institution. It is the right pedagogical model for blended learning. We will certainly put more effort into developing it and use it as base for teacher training and course development/test and evaluation, and to align it with our technical facilities.	Choose level of compliance:
Areas of improvement and recommendations - Comment 5.6: An additional point with respect to the pedagogical model is that it is not sufficiently explicit what is meant by 'student centred': what does this mean, can students get everything that they want? Probably not. What are their freedoms and where are the restrictions. The same is true for the use of the term Open University, which implies that the university provides Open education. There are many dimensions of 'openness', like open access to the bachelors. Which dimensions are actually open? Given the information provided, the committee concludes that this university is not 'open', rather it is distance learning university.	**Response**: A thoroughly designed plan for the interaction of the students with the teaching staff and among themselves is foreseen in all courses of the program. All courses contain the necessary number of interactive processes (διαδραστικές διεργασίες) between students and professors and students with students, with the formulation of small groups of students interacting with the faculty and the adjunct professors on various aspects of the program's contents, online discussions, coordination meetings on the platform, analysis of data and presentations of results, presentations of reports etc., as well as self-assessment activities. The teleconferences take place on the platform with the participation of both small groups of students, as well as with the whole classes of students, thus providing the right blending of interactive activities. All the above measures, together with the teachers' duties, are designed to constitute real student-centered teaching methodology. You can also refer to the analytical contents of Annex 6 submitted with our application for Institutional Accreditation, which contain the corresponding Regulations regarding the Pedagogical Planning Committee of our Institution, the Professor /Counsellors Duties & Responsibilities, and the Distance Learning Teaching Methodology. In addition, a sample course on Research Methodology, with significant interactions between the students and the teachers and the students by themselves was proposed to be presented to the members of EEC, but they did not manage to include it in the deliberations of their committee. With respect to the freedom and restrictions of the students, these are clearly described in the Charter and Statutes of the Institution and in the Students Handbook, containing all the details of the grading system and the students' rights and obligations, as well as the services and welfare provided to them.	Choose level of compliance:

	The term Open Education for our Institution refers to the realization of the availability for people to study, irrespectively of their status, location, and pace of learning, by exploiting the state-of-the-art technological infrastructure and the distance learning methodologies of the University, which give them the possibility to study remotely. In terms of access to the study programs offered by the University, it goes without saying that its potential students must have already completed the equivalent level of the lower degrees to the one they are seeking to enroll-in at the University. In most cases, the potential students must have been already graduated from certain fields of studies and exposed to some threshold material in these fields, which is declared in the corresponding announcements of the study programs of the University, unless this specific material is explicitly contained in the courses to be taught by the given program. The broadness of acceptable background fields for enrolment in each program of study also constitute a kind of 'openness' for the programs. At the moment, and despite the fact that Cyprus already signed the Lisbon Recognition Convention, no informal or non-formal education qualifications can be accepted as criteria for enrolment in our programs, due to the 'unfinished implementation' of the NQF framework in Cyprus (as explained analytically in the answer to Comment 4.4), which is the seat-country of our university.	
Comment 5.7: General Comment with respect to the following Sub-areas of the Institution evaluated by the EEC: (a) Teaching and Learning resources (b) Physical resources (c) Human Support resources (d) Student Support resources	**Response:** All the teaching and learning resources, the physical resources, the human support resources, and the student support resources are analytically and clearly described in the Charter of our Institution, in the application of our Institution, its policies, its budget planning, in the presentations provided to the EEC, and in the corresponding Handbooks for the Academic Personnel and Students. When the Accreditation of the Institution is provided, so that it can function as an accredited University, the Institution will be able to hire all the proper human resources to start their heavy-duty responsibilities and raise the status on the learning human resources and student support resources.	

6. Additional for doctoral programmes

(ALL ESG)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
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7. Eligibility (Joint programme)

(ALL ESG)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
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D. Conclusions and final remarks

Conclusions and final remarks **by EEC**	Actions Taken by the Institution	For Official Use ONLY
Comment D.1: Clearly formulate the aim of the programme.	**Response:** The aims of the Cosmos master's programme in Medical Physics and Diagnostic Imaging are clearly formulated, and its contents analytically described in the corresponding study guides. The structure, duration, contents, and learning outcomes of the Programme were designed and are in direct correspondence to the latest (since 2013) recommendations of the international professional associations of medical physicists EANM and EFOMP (includes the national representative of Cyprus) **[Reference attached: Physica Medica (2013) 29, 139-162]**, which are the corresponding professional regulatory bodies. In addition, the full Syllabi of our Programme were sent to the Cyprus Council Registering Physicists in Medicine expecting their comments. We are also in contact with the Cyprus national authority for radiation protection. Our master's degree reflects the context, level, content, and status of studies pursued in a conventional MSc degrees in Medical Physics and Diagnostic Imaging. It does involve the completion of a programme at a high academic level (grounded on the great expertise and experience of the faculty to be teaching the courses), complemented by the required practical activities and training (grounded on the laboratory exercises, of 44 hours duration offered during the Summer Semester in Cyprus and the practical tasks by our reputable clinical partners providing the required training). For the clinical type courses each student will perform certain (defined in the corresponding study guides) tasks, under the supervision of qualified faculty personnel. What does this differ from other study programs offered by conventional universities? Through this Programme the graduating students should become medical physicists, eligible to be hired as such. One should consider that no master's programme in medical physics offered internationally today covers the same courses as another one beyond the level of the two thirds (2/3) of the courses.	Choose level of compliance:
Comment D.2: The admission requirements for the study programme are formulated in rather vague terms as "equivalent to a BSc or MSc degree in physics". While a BSc or MSc degree in physics would indeed enable the students to follow the programme, it is not clear what should be considered as equivalent	**Response:** According to the legislation of KYSATS, the legal organization of Cyprus for accreditation of foreign degrees, it is clear what EQUIVALENCE of degrees means – it has to do with the DURATION of the degrees. In this sense all bachelor's degrees in physics, chemistry, engineering, computer science, biology and medicine are EQUIVALENT to one another. According to KYSATS the listed examples for equivalent educational backgrounds are not debatable. The only additional issue required to attend the multi-collective	Choose level of compliance:

to that. The listed examples for equivalent educational backgrounds are debatable. A clear formulation of the minimum requirements should therefore be included. In addition, the selection criteria for the interview for students not directly fulfilling the eligibility standards as well as the conditions for passing the interview should also be clearly described.	programme of Medical Physics and Diagnostic Imaging, is some exposure to basic knowledge in physics. All the required material, however, on the interaction of radiation with matter and other useful physics knowledge, is taught in the core courses of the Programme. As far as the exact selection criteria is concerned for the interviews for potential students that do not directly fulfill the eligibility standards and conditions for being accepted in the Programme, we repeat that they will be clearly described in the corresponding announcement for filing applications to enroll in the Programme.	
Comment D.3: As the program is addressed to students from any country, with different educational systems but also different systems for qualifying professional in the medical radiation physics and diagnostic radiology fields, there should be a procedure in place for recognising not only prior formal learning but also informal learning through work experience.	**Response:** As was explained above (see the response provided to **Comment 4.4**), and contrary to the EEC suggestion, at the moment there is no possibility of recognising informal and non-formal learning in the admission criteria of our university: Cosmos Open University would like to maintain compliance with the Lisbon Recognition Convention, waiting at the same time for Cyprus to implement all policies and measures with respect to NQF and non-formal and informal learning validation mechanisms. For as long as this might need to take place, we are required to comply with the instructions and recommendations of CYQAA according to the existing Cyprus legislation on foreign degrees' recognition (see KYSATS) and the law on the operation of Private Universities. This excludes for the moment informal and non-formal education from being considered in the entrance criteria of our university.	Choose level of compliance:
Comment D.4: The learning outcomes, however, are not realistic given the duration, the content, and the learning methodology to be employed in the programme. The certificate/degree proposed will not reflect the context, level, content and status of studies that are pursued in a conventional MSc degree in Medical Physics and Diagnostic Imaging. The latter involves the completion of a programme at a high academic level complemented by practical activities and training. This will not be provided in the proposed programme. Please note that in the opinion of the EEC, the current intended learning outcomes numbered 3, 4, 5 and 6 are	**Response:** The learning outcomes numbered 3, 4, 5 and 6 are expected to be fulfilled by the students upon graduating with their master's degree. They are not considered as overambitious and unrealistic, given the distance-learning character and duration of the Programme. The reason is that our Programme is designed to keep the right percentage of practical training for the students as that contained in a conventional medical physics programme.	Choose level of compliance:

overambitious and unrealistic even if the programme will be revised as suggested by the EEC given its character involving distance learning and duration.		
Comment D.5: Revise the admission criteria for the students in order to ensure the minimum required background knowledge for following the program. Narrow the admission criteria to students holding a BSc or a MSc in Physics.	**Response:** Given the open nature of the Institution, the multi-collective nature of the Programme, and the fact that the courses of the Programme do cover themselves all the necessary physics knowledge needed, we should not narrow the admission criteria to only students holding a BSc, or an MSc in Physics as the EEC suggests. For a full presentation of this point to justify our point, please see the analytical responses to **Comments 4.1** and **D.2**	Choose level of compliance:
Comment D.6: Improve the design of the program by refining the content of the courses, extending to a full course the part dedicated to radiobiology and including topics that are currently missing such as the study of the basics of anatomy and physiology. Involve the national and international professional associations of medical physicists in the design of the program and the representatives of the national and international professional regulatory bodies for radiation protection.	**Response:** For a full answer to this Comment, please see the responses to **Comments 1.3** and **D.1** One should also consider, as stated before, that no master's programme in medical physics offered internationally today covers exactly the same courses as another one in the same field beyond the level of the two thirds (2/3) of the courses.	
Comment D.7: Develop a program for the quality assurance that is specific for the programme. Emphasis should be put on measures and activities to ensure and monitor the quality of the teaching at the medical facilities and other partner institutions assisting and enabling the practical activities. Keep in mind the international dimension of the programme.	**Response:** The Quality Assurance of the Programme follows the principles and specifications of the Quality Assurance strategy of the whole Institution, as presented to the EEC. It is not expected that each study programme should have its own strategy on Quality Assurance, this is not realistic; however, certain actions and measures described in the courses will be taken to assure the quality of the Programme, such as following specific tasks of the students while conducting their practical training, close supervision in the clinical aspects of their thesis, log-keeping of their activities, controlling their direct involvement in the collection and analysis of medical data, filing their reports etc.	

E. Higher Education Institution academic representatives

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Panos Razis	President of the Governing Board	
Andreas Pavlakis	Vice - President of the Governing Board	
Nikolas Stylianides	Member of the Governing Board	
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