EXTERNAL EVALUATION REPORT – UNIVERSITY OF PITEŞTI

IOSUD evaluation

I. INTRODUCTION

The University of Pitești (later in the text UPIT) is a university in Pitești , Argeș County, Romania. The University was founded back in 1962 and serves three goals: research, education and community service. The University consists of six Faculties: Faculty of Sciences, Physical Education and Computer Science; Faculty of Mechanics and Technology; Faculty of Electronics, Communications and Computers; Faculty of Education, Social Sciences and Psychology; Faculty of Economics and Law; Faculty of Theology, Philology, History and Arts.

In 1997 through the address of the Ministry of Education no. 11128 / 23.07.1997, the Pitești received the right to organize a doctorate in the technical science branch. Over the following years, new doctoral domains have been added to the list of offered programmes: 1999, I.O.D. in the fundamental field of doctorate Engineering sciences; in 2000, I.O.D. in the field of Electronic Engineering and Telecommunications; in 2000, I.O.D. in the field of Mathematics; in 2000, I.O.D. in the field of Materials Science and Engineering; in 2002, I.O.D. in the field of Informatics; in 2003, I.O.D. in the field of Physical Education and Sports; in 2004, I.O.D. in the field of Philology; in 2004, I.O.D. in the field of Mechanical Engineering; in 2005, I.O.D. in the field of Biology; in 2009, I.O.D. in the field of Automotive Engineering; in 2010, I.O.D. in the field of Industrial Engineering.

The management structures within UPIT are:The University Senate and the Board of Directors, at the university level; the faculty council, at the faculty level; the department council, at the department level. The academic leadership functions within UPIT are the following: The rector, vice-rectors and director of CSUD-UPIT, at university level; the dean, vice deans, at the faculty level; the department director, at the department level. Advisory structures consists of the office of the University Senate and the office of the Board of Directors, at the university level, as well as Faculty Council Office, at the faculty level. In order to ensure highest academic standards the University also encompasses: Center for Quality Management and University Programs and the University Ethics and Deontology Commission.

The University boats 17 research centres to which doctoral students have access and which provided an list of recent achivements. In order to disseminate and consolidate new research the University there are several important research centres in the portfolio of Vice-Rector for Research and Informatization:

The Research-Development-Innovation& Technology Transfer Center (CCDITT), which ensures the operative management of support actions for scientific research at the University of Pitești;

The Center for Information Technology, Computers and Informatisation (CTICI), which has the mission to ensure the operative management of support actions in the field of information technology, computers and computerization;

The R & D Center for Innovative Materials, Processes and Products for the AUTOmobile Industry (CRC & D-Auto), in which multi-disciplinary and multi-disciplinary research and development activities are carried out;

The Regional Industrial Property Center (CRDPI) - developed in partnership with OSIM, which promotes the protection of industrial property and provides information in the field of Industrial Property.

During the process of external evaluation the academic staff and IOSUD's management were quite open in their communication and delivered all additionally requested materials such as the citation list for every single doctoral supervisor, list of their academic achievements and the financial structure, with special emphasis being put on the research grants.

More detailed account of the major strenghts, weaknesses, opportunities and threats are to be found in the section IV. SWOT ANALYSIS.

The evaluation for the UPIT as an IOSUD was conducted on behalf of the evaluation team composed of: Prof. univ. dr. Razvan Nistor (Universitatea din Craiova), Associate Professor Kristijan Kotarski (University of Zagreb) and Dalban Costel-Marian (PhD student from Universitatea „Alexandru Ioan Cuza" Iași). In charge of the mission was Prof. univ. dr. Nicoleta CORBU (Școala Națională de Studii Politice și Administrativa din București). We shall add to this list: IOSUD expert for Biological and Biomedical Sciences, Prof. Dr. Diana Cupșa, IOSUD expert for Humanities and arts, Prof. univ. dr. Iulian Boldea; IOSUD expert for Engineering sciences, Prof. univ. dr. Aiordachioaie Dorel, IOSUD expert for The Science of Sports and Physical Education, Prof. univ. dr. Stoica Marius and IOSUD expert for Mathematics and Natural Sciences, Prof. univ. dr. Negru Viorel. Mrs. Carmen Sirbu of the Universitatea Danubius din Galați served as a technical secretary. The evaluation started on 22th of November and ended on 26th of November.

II. METHODS USED

- Analysis of the internal evaluation report for the underlying IOSUD
- Analysis of other documents requested in physical format (proof of participation in international projects, short description of key achievements of every single doctoral domain, exmples of evaluation, citation list comprising doctoral supervisors, budgetary-related information, etc.)
- Online meetings with: the doctoral coordinators, directors of research centers, professors, Doctoral Council, students, graduates, employers, quality management staff.

Unfortunately, due to pandemic restrictions I was not able to travel to Romania as an external evaluator.

III. ANALYSIS OF PERFORMANCE INDICATORS

Domain A. INSTITUTIONAL CAPACITY

Criterion A.1. The administrative, managerial institutional structures and the financial resources

Standard A.1.1. The institution organizing doctoral studies (IOSUD) has implemented the effective functioning mechanisms provided for in the specific legislation on the organization of doctoral studies.

1) Performance Indicator A. 1.1.1.

The documents that were available through the enclosed hyperlinks in the self-evaluation report, as well as documents delivered upon request provide sufficient written evidence that the doctoral programme has or is subject to:

(a) the internal regulations of the Doctoral School;

(b) the Methodology for conducting elections for the position of director of the Council of doctoral school (CSD), as well as elections by the students of their representative in CSD and the evidence of their conduct;

c) the Methodologies for organizing and conducting doctoral studies (for the admission of doctoral students, for the completion of doctoral studies);

d) the existence of mechanisms for recognizing the status of a Doctoral advisor and the equivalence of the doctoral degree obtained abroad;

e) functional management structures (Council of the doctoral school), giving as well proof of the regularity of meetings;

f) the contract for doctoral studies;

g) internal procedures for the analysis and approval of proposals regarding the training for doctoral study programs based on advanced academic studies

Furthemore, additional round of interviews with programmes's management enabled the final check of the written documents to ensure the compliance of the IOSUD under evaluation in every single category from a) to g). There were no major anomalies detected and all functioning mechanisms are in place. In **Annex A.I.2** , **Annex A.I.32, Annex A.I.33 , Annex A.I.34, Annex A.I.35 and Annex A.I.36** there are to be found Regulations, Methodologies, Procedures, Formulations which extensively cover the matter. The CSUD at the IOSUD meets regulary, students are represented, elections are organised according to the clearly stipulated rules, there are available minutes of the meetings and the full list of members is publicly displayed.

The external reivewer recommends the improvement of user-friendliness of the IOSUD's own webpage. The first contact with the University normally occurs online and this first impression is very important for attracting research new partnerships, foreign students and visiting professors from

abroad. In that regard, more content in English would be highly welcome. On the other hand, it is very commendable that the new composition of the CSUD includes the representative of Dacia Renault as an important link with the private sector, to ensure the knowledge transfer and cross-sectoral exchange. Additional improvement represents the merging of Mathematics, Biology and Informatics into one entity, thereby reducing the number of doctoral schools to four. In organisational terms this facilitates coordination and more efficient decision-making process. All in all, **the indicator is fulfilled.**

Standard A.1.2. The IOSUD has the logistical resources necessary to carry out the doctoral studies' mission.

2) Performance Indicator A.1.1.2. The doctoral school' Regulation includes mandatory criteria, procedures and standards binding on the aspects specified in Article 17, paragraph (5) of the Government Decision No. 681/2011 on the approval of the Code of Doctoral Studies with subsequent amendments and additions.

The activity of doctoral schools (SD) is carried out in accordance with the provisions of the Code of Doctoral Studies, the Regulation on the organization andconduct of doctoral studies at IOSUD University of Pitesti, approved by the Senate on 21.01.2019. (**Annex A.I.32**). In online interviews and meeting is was possible to confirm that the IOSUD has 4 doctoral schools that manage a doctoral study program: Theology, Letters, History and Arts; Science, Physical Education and Computer Science; Mechanics and Technology; Electronics, Communications and Computers. One doctoral school among them is interdisciplinary and comprises fields such as: The science of sports and physical education, Mathematics, Informatics and Biology. **Annex A.I.39** and **Annex A.I.40** testify to the fact that the admission procedure is competitive and that the students' rights and obligation are delineated according to the study contract. Organisational structure and hierarchy is clearly outlined in the **Annex A.I.38**.

The external reviewer recommends that the sources of funding for doctoral students are clearly explained. There are several categories mentioned in the self-evaluation report: budget, budget with scholarship, fees on page 12. Then suddenly, the report gives the composition of funding that consists of budget and tax. This is definitely very confusing to someone who is not a Romanian national and is not familiar with how the financial affairs are precisely settled.

Generally, above mentioned performance indicator is fulfilled.

3) Performance Indicator* A.1.1.3 . Doctoral schools included in IOSUD are organized as disciplinary or interdisciplinary disciplines/thematic, according to Article 158, paragraph (7) of the Law of National Education No. 1/2011 with subsequent amendments and additions.

As was already stated above, the IOSUD consists of four doctoral schools spanning over 10 different domains. Hence, **the indicator is fulfilled.**

Standard A.1.2. The IOSUD has the logistical resources necessary to carry out the doctoral studies' mission.

4) Performance Indicator A.1.2.1. The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic background of the IOSUD under evaluation has been demonstrated.

The self-evaluation report states: *The record of the doctoral students and of their academic path is made by the doctoral schools and by the secretariat of the Doctoral Department through computerized programs (Microsoft Office Excel program).* The reviewer recommends and requires the adoption of a more efficient software that keeps the tab on every student and which is accessible to both students and doctoral schools' administrators. This would streamline the processes and enable that the every change is visible to all counterparties in real time. The whole IOSUD should follow the path adopted by the domain of Automotive Engineering, namely, the introduction of a special application open to both students, supervisors and administrative staff. **The indicator is partially fulfilled.**

5) Performance Indicator A.1.2.2. The existence and use of a software program and evidence of its use to verify the percentage of similarity in all doctoral theses.

The IOSUD relies on Sistemantiplagiat.ro, a well-known anti-plagiarism software. It is especially praiseworthy that the UPIT aggregates similarity score for all defended PhD thesis and communicates it in a straighforward way. The latter is mandatory, while it should be more promoted and possibly made mandatory for other scientific endeavours such as research articles, book chapters, books, etc. For all areas, exceeding the 50% threshold for similarity coefficient 1 and 5% for similarity coefficient 2 is considered suspicious. **The indicator is fulfilled.**

Criterion A.2. Research infrastructure

Standard A.2.1. The IOSUD/doctoral schools have a modern research infrastructure to support the conduct of doctoral studies' specific activities.

6) Performance Indicator A.2.1.1. The IOSUD/the doctoral school(s) present proof of posessing or having rented adequate spaces for research activity specific to doctoral studies (laboratories, experimental fields, research stations etc.)

Unfortunately, the reviewer was not able to travel in situ and perform a check of the research infrastructure. Nevertheless, the doctoral programme's management provided ample written evidence that it posseses cutting-edge and relatively new infrastructure, starting with lecture halls, computer rooms and labs (60 of them), as well access to the library that offers all the necessary books and learning materials to students and professors. The library is fit for purpose and enables plently of space to visitors. (406 places). All Annexes from **Annex A.I.45** to **Annex A.I.54** confirm that both resources and infrastructure are very satisfactory. There has been a significant expansion since 2014.

This is a good evidence of UPIT's management committment to prevent any bottlenecks given the research tools and infrastructure. The ANELIS 2020 contract covers the access to: Springer Journals, Thompson Web of Knowledge, Springer Archive and Thompson Web of Knowledge Archive. This is commendable. **The indicator is fulfilled.**

7) Performance Indicator A.2.1.2. The IOSUD/doctoral school(s) has/have collaboration agreements with higher education institutions, research institutes, research networks for joint partnerships and have access for using various research infrastructures; the offer for research services is presented publicly using a dedicated platform.

If there had been no meticulous report written by Professor Nistor and coordination activities with him, the external extert could not attest the fulfillment of the above mentioned performance indicator. It is an imperative to consolidate those research partneships and agreements in several passages in English before future evaluation, in order for them to be easily accessible and understandable to external reviewer. It is unacceptable that the external reviewer had only obtained a hint at **Annex A.I.54a**, which is only a fraction of the arguments needed to attest the fulfillment of the indicator. **The indicator is fulfilled.**

8) Performance Indicator A.2.1.3. The IOSUD/doctoral school(s) proves that it is/are concerned with permanent renewal of the research infrastructure to provide doctoral students access to up-dated research resources, by applying to various funding competitions and using own university resources for acquiring new research infrastructure.

As was already stated in Performance Indicator A.2.1.1., the IOSUD has a very responsible approach towards procuring scientific equipment, financed from various sources. The list of research grants and external funding obtained by researchers in the field in Materials Engineering, covering years 2016-2020, are quite impressive. **The indicator is fulfilled.**

Criterion A.3. Quality of Human Resources

Standard A.3.1. At the level of each Doctoral School there are sufficient qualified staff to ensure a quality educational process.

9) Performance Indicator * A.3.1.1. The share of Doctoral advisors coordinating simultaneously more than 8 doctoral students but not more than 12 during their doctoral studies does not exceed 20%.

In light of this performance indicator the external reviewer has counted 8 doctoral supervisors with 8 our more PhD candidate. There are even three doctoral supervisors with 12 or more PhD candidates. Hence, out of 40 of doctoral supervisors, 20% of them are coordinating 8 or more PhD candidates. This is on very brink of exceeding the allowed threshold. Nevertheless, the reviewer will issue the assessment that **the indicator is partially fulfilled.** The main rationale behind this is the fact that the number of PhD students enrolled in the academic year 2020/2021 significantly jumped from the historical average (years from 2016 onwards.) The structure of enrollment is quite unfavourable, with

the majority of students enrolled in Philology and The Science of Sports and Physical Education domains, which will inevitably burden the limited resources and available supervisors, some of which will for the first time have to accept 8 or more students. This assessment comes in spite of the fact that new habilitations acquired on behalf of the academic staff (**Annex A.I.55**).

10) Performance Indicator A.3.1.2. At least 50% of all teaching/research staff involved in teaching/research activities related to training programs for advanced university studies or in individual research/art creation programs have a full-time employment contract for an indefinite period with the IOSUD.

There 79,82% of the staff with a full-time employment contract for an indefinite period with the IOSUD. This should be also cleary written in the English version of the self-evaluation report, which is scarce with information on that count. Hence, **the indicator is fulfilled.**

Domain B. EDUCATIONAL EFFECTIVENESS

Criterion B.1. The number, quality and diversity of candidates enrolled for the admission contest

Standard B.1.1. Candidates admitted to doctoral studies demonstrate academic, research and professional performance and are diversified as social representation and by gender.

11) Performance Indicator * B.1.1.1. Admission to doctoral study programs is based on selection criteria including: previous academic, research and professional performance, their interest for scientific or arts/sports research, publications in the domain and a proposal for a research subject. Interviewing the candidate is compulsory, as part of the admission procedure*.*

The institution organizing doctoral studies has the capacity to attract candidates from outside the higher education institution or a number of candidates exceeding the number of seats available. Candidates admitted to doctoral studies come from graduates of master's programs or long-term studies at the University of Pitesti, or other universities in the country or abroad. The precise method for calculating final scores of applicant is provided in the **Annex A.I.39.** The method takes into account both past academic achievements and applicant's performance at the admission test. It would be highly recommendable to insist on foreign language competencies and ensure that the admission is only granted to students who have sufficient command of English and/or French. **The indicator is fulfilled.**

12) Performance Indicator B.1.1.2. The IOSUD/doctoral school(s) have a policy for stimulating enrollment of doctoral students coming from disadvantaged social environments, by allocating

reserved positions in the admission procedure and/or granting special scholarships, as well as organsing support programs to prevent drop-outs.

IOSUD The University of Pitesti stimulates the enrollment of candidates from socially disadvantaged backgroundsby allocating special places for admission for Roma or by providing facilities for the payment of fees (**Annex A.I.39** and **Annex B.I.1**). The UPIT implemented projects that aim at enrollment of students from disadvantaged backgrounds. It would be recommendable to continue with similar projects in the future, since the last one was discontinued several years ago. Furthemore, there is gap between allocated slots and the number of students enrolled within the existing affirmative action programme. In the future, more financial support should be granted to students who are talented and at the same time come from disadvanteged background. **The indicator is fulfilled.**

Criterion B.2. The content of doctoral programs

Standard B.2.1. The training program based on advanced university studies is appropriate to improve doctoral students' research skills and to strengthen ethical behavior in science.

13) Performance Indicator B.2.1.1. The training program based on advanced academic studies includes at least 3 disciplines relevant to the scientific research training of doctoral students; at least one of these disciplines is intended to study in-depth the research methodology and/or the statistical data processing (**Annex B.I.2**). There exists enough of evidence to condlude that **the indicator is fulfilled.** However, more statistical and data science skills should be incorporated into the curriculum, especially in the domains of Sports Science and Physical Education and Philology, in order to increase scientific impact of both doctoral supervisors and students alike.

14) Performance Indicator B.2.1.2. At least one discipline is dedicated to Ethics and Intellectual Property in scientific research or there are well-defined topics on these subjects within a discipline taught in the doctoral program.

The training programme includes Ethics and Academic Integrity. Students in all domains are exposed to social norms that stress the importance of IP protection, ethics, plagiarisma avoidance and research integrity (**Annex B.1.I.4**). **The indicator is fulfilled.**

15) Performance Indicator B.2.1.3. The IOSUD has mechanisms to ensure that the academic training program based on advanced university studies addresses "the learning outcomes", specifying the knowledge, skills, responsibility and autonomy that doctoral students should acquire after completing each discipline or through the research activities.

Annex B.I.3 gives an overview of the main learning outcomes to be achieved after the completion of a particular course or a programme. **The indicator is fulfilled.**

Criterion B.3. The results of doctoral studies and procedures for their evaluation

Standard B.3.1. Doctoral students capitalize on the research through presentations at scientific conferences, scientific publications, technological transfer, patents, products and service orders.

16) Performance Indicator B.3.1.1. For the doctoral school there are in place mechanisms for valorification of the results of doctoral studies in accordance with the specificity of the particular domain (i.e. technologial transfer, products, patents in the case of exact sciences; products and services for social sciences and humanities; festivals, contests, recitals, sports competitions; cultural-arts orders in the vocational domain; presentations ar national and international conerences, publication of research results in national and international publications, engaging doctroal students in writing research-development projects etc.)

The IOSUD enables, facilitates and supports the participation of PhD students in international scientific conferences. In the period under evaluation 70 students participated at the international conferences (23 obtained financial support from the UPIT). It is also very commendable that students are financially supported when publishing their research in open access journals. Even more praiseworthy is the fact that the special emphasis is put on rewarding financially students who manage to publish in journals with impact factor (indexed in prestigious international databases). This policy should be even reinforced in the coming period to increase UPIT's international and domestic visibility. Furthemore, to avoid any suspicion of unfairness and lack of merit when allocating financial resources, one should implement regular financial reporting on the quantity and quality of that funding. Hence, **the indicator is fulfilled.**

Criterion B.4. Quality of doctoral theses

Standard B.4.1. Doctoral theses fulfil high quality standards

17) Performance Indicator B.4.1.1. At the level of IOSUD, the percentage of theses non-validated, at the level of General Council of the National Council for Attestation of University Degrees, Diplomas and Certificates (CNADTCU), without the right of further amendments and re-organizing the process of public defending, is not exceeding 5% in the last 5 years.

Having only two cases of invalidated PhD theses during the evaluation period (one in 2017 and one in 2020) while the total number of defended theses amounted to 62, the IOSUD met

the expected benchmark. The final score amounts of 3,2%. Hence, **the indicator is fulfilled.** The recommendation for the future period is that the reasons for the invalidation are better communicated to the evaluation committee *ex ante*. Furthemore, those examples should be explained to the newly enrolled students, in order to avoid repeating the same mistakes themselves.

Domain C. QUALITY MANAGEMENT

Criterion C.1. Existence and periodic implementation of the internal quality assurance system

Standard C.1.1. There are an institutional framework and procedures in place and relevant internal quality assurance policies, applied for monitoring the internal quality assurance.

18) Performance Indicator C.1.1.1. The IOSUD shall demonstrate the continuous development of the evaluation process and its internal quality assurance following a procedure developed and applied at the level of the doctoral school(s), the following assessed criteria being mandatory:

(a) the scientific work of Doctoral advisors;

(b) the infrastructure and logistics necessary to carry out the research activity;

(c) the procedures and subsequent rules based on which doctoral studies are organized;

d) the academic and social services (including participation to various events, publication of papers etc.) and counselling made available to doctoral students.

Annex C.I.1 and C.I.2 show the existence of internal evaluations and self-evaluations. CNATDCU's standards are applied across the board which facilitates the comparison among supervisors. It would be also important to present more examples of conducted evaluation activities in the future, with a clear flowchart of activities stemming from observed deficiencies. It would be also recommendable to create a more direct link between students' evaluations and teachers' performance. E.g. besides regular and fixed pay, the supervisors with the best grades earned through teaching and supervision activities, as well as the highest CNATDCU standards should be rewarded from a specially set remuneration fund. **The indicator is fulfilled.**

19) Performance Indicator C.1.1.2. Students' associations and, according to the case, representatives of students organise elections in the community of doctoral students, for positions in the CSUD, by universal vote, direct and secret, all doctoral studnets having the right of electing or being elected.

In an interview with representatives of the UPIT's doctoral students the reviewer was able to verify the veracity of the statements contained in the self-evaluation report for the performance indicator C.1.1.2. Additional evidence is presented in the **Annex A.I.38**. The recommendations is to stress even more importance on inclusion of students and their representatives in the work of CSUD. The means higher participation of students in the secret, free and fair elections for the post of their representative. Furthemore, it would be advisable to formalize students exchanges and form an association of students. **The indicator is fulfilled.**

20) Performance Indicator C.1.1.3. Students' associations and, according to the case, representatives of students organise elections in the community of doctoral students at the level of each doctoral school, for positions in the councils of doctoral schools, by universal vote, direct and secret, all doctoral students having the right of electing or being elected.

The representative of doctoral students in the Doctoral School Council are elected by universal, direct and secret ballot of all doctoral students. Basic data on the election process is retrievable (date of elections, votes cast and elected representatives). In the future, **The indicator is fulfilled.**

21) Performance Indicator * C.1.1.4. Following the internal evaluation, IOSUD and the doctoral schools draft strategies and policies aiming to eliminate the identified deficiencies and to stimulate scientific and academic performance of IOSUD

The doctoral school drafts strategies but those strategies are in need of better communication, especially when it comes to communication with foreign experts. There are some annexes covering the issue but there is no single line of explanation in English in the self-evaluation report. The conformity to the performance indicator was only made possible indirectly, in a communication with Romanian expert, which demonstrated some of the evidece in favour of positive assessment. **The indicator is fulfilled.**

Criterion C.2. Transparency of information and accessibility of learning resources

22) Performance Indicator C.2.1.1. The IOSUD publishes on the website of the organizing institution, in compliance with the general regulations on data protection.

It is commendable that the IOSUD under evaluation publishes on its webpage all relevant information such as specific regulations, admission procedure, learning outcomes, skill set taught to students, example of doctoral contract. The external reviewer strongly recommends to translate and publish those documents in English as a part of its internationalization campaign. As was already states above, the website is in need of major overhaul to improve user experience. It conveys the impression of a webpage stuck in time that is long gone. **The indicator is fulfilled.**

Standard C.2.2. The IOSUD/The Doctoral School provides doctoral students with access to the resources needed for conducting doctoral studies.

23) Performance Indicator C.2.2.1. All doctoral students have free access to one platform providing academic databases relevant to the doctoral studies domain of the their thesis.

The fact that doctoral students have a free access to several platforms providing academic database for the successful pursuit of their doctoral studies was checked and confirmed (Web of Science and Scopus among them). **The indicator is fulfilled.**

24) Performance Indicator C.2.2.2. Each doctoral student shall have access, upon request, to an electronic system for verifying the degree of similarity with other existing scientific or artistic works.

Students are able to use www.sistemantiplagiat.ro to check for the similarity of their PhD theses with existing scientific publications. The significance and accessibility of this tool has also contributed to the very low percentage of invalidated PhD theses over the last five years. The external reviewer recommends to the IOSUD to free up the access to anti-plagiarims software to students even without specific request sent to the doctoral supervisor. In that way students can detect the problem of too much similarity even at a more earlier stage in writing their final thesis (e.g. upon completing the chapter). It would be also strongly recommendable to use the software for all scientific publications of all students and doctoral supervisors. **The indicator is fulfilled.**

25) Performance Indicator C.2.2.3. All doctoral students have access to scientific research laboratories or other facilities depending on the specific domain/domains within the Doctoral School, according to internal order procedures.

Annex I.2.6.1, **Annex I.2.6.3**, **Annex I.2.6.4** and **Annex I.2.6.5.** testify to the ability of doctoral students across all six domains to access to scientific research laboratories and other research facilities at the IOSUD. The external reviewer strongly endorses better availability of those annexes that are not even incorporated into the English version of the self-evaluation report. **The indicator is fulfilled.**

Criterion C.3. Internationalization

Standard C.3.1. IOSUD/Doctoral school has a strategy in place and it is applied to enhance the internationalization of doctoral studies.

26) Performance Indicator * C.3.1.1. IOSUD, for every doctoral school, has concluded mobility agreements with universities abroad, with research institutes, with companies working in the field of study, aimed at the mobility of doctoral students and academic staff (e.g., ERASMUS agreements for the doctoral studies). At least 35% of the doctoral students have completed a training course abroad or other mobility forms such as attending international scientific conferences. IOSUD drafts and applies policies and measures aiming at increasing the number of doctoral students participating at

mobility periods abroad, up to at least 20%, wich is the target at the level of the European Higher Education Area.

The indicator is partially fulfilled since there is scarity of reliable and systematized data. Only after Professor Nistor sent me some data showing percentage was I able to conlude that less than 20% of students have completed their training course abroad (5 out of 66). Higher percentages are not only desirable but indispensable for the sake of achieving greater international prominence. It is especially concerning that students from the domains of Mathematics, Biology, Mechanical Engineering and Informatics were absent from those internationalization efforts.

27) Performance Indicator C.3.1.2. IOSUD supports, including providing financial support, to the organization of doctoral studies in international co-tutelage or invitation of leading experts to deliver courses/lectures for doctoral students.

Annex C.I.11 and **Annex C.I.12** are simply not enough to demonstrate the full compliance with the above mentioned indicator. Significantly greater effort is needed to invite more foreign experts either as guest lecturers, co-supervisors or members of the supervising committees. The external reviewer is concerned that there have been no noteworthy activities pertained to this indicator since 2018. **The indicator is partially fulfilled.**

28) Performance Indicator * C.3.1.3. At least 10% of the doctoral theses of every doctoral schools of the IOSUD are drafted and/or submitted in an international foreign language or are organised in international co-tutelage.

During the evaluation period, 62 doctoral theses were defended. Of these, 6 theses were presented in an international language and were written in an international language. The result is 9.68%. During the evaluation period, 4 co-supervised theses were completed, of which 2 in the field of Computer Science and 2 theses in the field of Industrial Engineering. **The indicator is fulfilled.**

29) Performance Indicator C.3.1.4. The internationalization of activities carried out during the doctoral studies is supported by IOSUD through concrete measures (e.g., by participating in educational fairs to attract international doctoral students; by including international experts in guidance committees or doctoral committees).

More ambitious steps are expected in the future to make some notable progress on the above mentioned indicator. First and foremost that means attracting more foreign students and offering more courses in English to be able to achieve the former goal. It is hardly convicing to fill the quota in the category of international co-tutelage and international co-supervision only from the ranks of Romanian speaking nationals, either from universities abroad or from the neighbouring Republic of Moldova. Furthermore, having organised the French and International Autumn Doctoral School in 2017 is not sufficient. Similar event organised annually or bi-annually could be accepted as a credible evidence for the fulfillment of this indicator. Finally, more international students are highly desirable in the future. The average of one student per generation is low. Nevertheless, three foreign students in academic year 2020/2021 are a sign of a good direction. **The indicator is partially fulfilled.**

Criterion C.4. System for assurance of ethical and academic integrity

Standard C.4.1. IOSUD/Doctoral school has a functional and efficient system in place for prevention and assuring ethical and academic integrity norms.

30) Performance Indicator C.4.1.1. IOSUD, applies the current provisions regulating ethics, deontology/academic integrity, respectively to academic freedom and has developed:

- policies based on prevention regarding possible violations of the Code of ethics and academic integrity, demonstrated by public postioinings, studies, analyses or measures taken;

- practices and mechanisms for preventing fraud, from an institutional perspective as well as from the perspective of the doctoral students;

- practices for preventing possible fraud in academic activity, research or any other activity, including active measures for preventing and avoiding plagiarism of any kind, as well as promoting ethical and integrity/deontology principles or observing intellectual property norms, authors' rights and other related rights, among all members of the academic community;

- administrative instruments which allow applying effective and eliminatory sanctions;

- mechanisms and measures to assure equal opportunities and protection against intolerance and discrimination of any kind;

The University, through the University Senate, controls the way in which the Code of Ethics is observed and its application is proved by the adopted resolutions. The Ethics and Academic Integrity Commission monitors compliance with the code, receives complaints, debates the cases under discussion, proposes solutions and presents annually in the University Senate a report on cases and solutions, which is posted on the UPit website. All of the items listed above have been fulfilled which was also underlined in external reviewer's assessment of similar overlapping performance indicators. Furthermore, this was also verified in interviews with students and academic staff. Sanctions for non-ethical behavior are clearly communicated. **The indicator is fulfilled.**

31) Performance Indicator C.4.1.2. All intimations regarding suspicion of plagiarism related to doctoral theses have been analysed and resolved by the IOSUD within the time interval legally established for expressing in writing its position regarding the intimation received.

The Doctoral Schools did not have any plagiarism reports during the evaluated period. All notifications regarding suspicions of plagiarism related to doctoral theses are analyzed and resolved by IOSUD within the legal deadline for expressing a written point of view regarding the notification received. **The indicator is fulfilled.**

32) Performance Indicator C.4.1.3. Annual Reports of the Ethics commission of the IOSUD contain information on the stage of solving each case of intimation or own-intiative intimation regarding violation of norms or ethical aspects relevant for university doctoral studies. description of the facts, the findings from the assessed institution's documents and the evaluation visit itself.

At the IOSUD level, there were no notifications or self-notifications relevant for doctoral studies regarding the violation of certain norms and ethical issues. It would be highly recommendable to pair future self-evaluation reports with annual reports of the Ethics commission. **The indicator is fulfilled.**

33) Performance Indicator C.4.1.4. The measures taken by IOSUD after the final decision of CNADTCU to withdraw the title of "doctor" following accusations of plagiarism have addressed all the aspects mentioned in CNADTCU's decision and in the current legislation.

At the IOSUD level, it was not necessary to take measures following the final decisions of the CNATDCU to withdraw the doctor's degree following the plagiarism notifications. **The indicator is fulfilled.**

34) Performance Indicator C.4.1.5. The measures aiming to prevent academic fraud in the doctoral studies, taken by IOSUD, could be:

a) Suspension of the right to advise newly enrolled doctoral students, for a period of 3 years, in the case of doctoral advisors having coordinated a doctoral thesis with a definitive decision of withdrawal of the "doctor" title for plagiarism;

b) Exclusion from the IOSUD of the doctoral advisor having coordinated at least two doctoral theses with definitive decisions of withdrawal of the "doctor" title for plagiarism;

c) Suspension of the right to organize the admission process of new doctoral students in the Doctoral studies domain, for a period of 2 years, if in the respective domain a doctoral thesis has been finalized and defended with a definitive decision of withdrawal of the "doctor" title for plagiarism.

All these sanctions are provided in the Regulation on the organization and development of doctoral studies at the UPIT:

https://www.upit.ro/_document/172548/regulament_de_organizare_si_functionare_al_comisiei_de_etica_si_deontologie_universitara_2021.pdf

There have been no cases of such deviations in IOSUD. **The indicator is fulfilled.**

35) Performance Indicator *C.4.1.6. The scientific reviewers members in the commissions for public defense of two or more doctoral theses with definitive decisions of withdrawal of the "doctor" title for plagiarism, have not been nominated in other commissions for public defence of doctoral theses for a period of at least 3 years.

Since in the evaluated period there were no theses that had elements of plagiarism, this performance indicators has been easily met. **This indicator has been fulfilled.**

36) Performance Indicator C.4.1.7. IOSUD has a database open to the public containing all the doctoral theses defended in the institution beginning at least in 2016 in a format including: the domain, author, doctoral advisor, title of the thesis and the thesis in electronic format (if there is an agreement of the author).

The minimally required information covered within this indicator are retrievable from the http://tinread.upit.ro/opac/search?q=Teză+de+doctorat&max=0&view=&sb=relevance&ob=asc&level=all&material_type=all&do_file_type=all&location=0 . It would be highly recommendable that for every thesis there is also a short summary plus the the committee's. However, it would be highly recommendable to expand on the existing information with a short summary in English to increase the impact of research. **This performance indicator is fulfilled.**

IV. SWOT ANALYSIS

Strenghts	Weaknesses
• Dedicated and very well-trained academic staff immersed into broader social environment • Excellent communication and collaboration between doctoral supervisors and PhD students as shown by Google online poll on a good sample of students • Pretty good citation score in Web of Science and respectable H-index scores for doctoral supervisors in several domains (Mathematics, Computer Science and Automotive Engineering) • Very good research infrastructure that facilitates applied research and reinforces partnership with various stakeholders outside of the UPIT • The bulk of valuable equipment that is procured in cooperation with private companies (especially equipment in the domain of Automotive Engineering • Broad network of research centres that also involve doctoral students in research from the very beginning of their academic journey • Implementation of research projects through existing network of 18 research centres	• No courses taught in English which hampers effective internationalization • No KPI and time-trials with regard to internationalization activities • No strategy of internationalization in English which would ease the process of seeking potential partnerships from abroad • Unsatisfactory level of openness to international students as a proxy for internationalization • Large imbalance in the number of doctoral students finishing their PhD in domains of Philology and The Science of Sports and Physical Education as compared to the number of doctoral students Mechanical Engineering, Interdisciplinary Studies, Mathematics and Informatics • Decrease in the share of revenue stemming from international projects covering R&D (from 0,27% to 0,04% in the period 2016-2020) as a percentage of total revenue • Non-existent scientific visibility of doctoral supervisors from the Philology domain in the Web of Science database (only 1 WoS citation!)

• Increase in revenue from R&D grants by 62% in the period from 2016-2020 • Solid financial position as reflected by an increase in total revenue by 43% • Significant amount of acedemic and research projects financed by the EU (10 of them whose duration covers the period either until 2022 or 2023) • Significant level of graduates' satisfaction with doctoral programmes at the UPIT as shown by Google online poll on a good sample • Solid partnerships with other research and education institutions in Romania • Satisfactory level of digitalization • Systematic overview of all processes and documents in one place (on the downside, there are next to no documents in English • Diversification of study programmes	• Lack of information about doctoral programmes in English • Insufficient mobility of doctoral supervisors and students • Relatively unfavourable supervisor to student ratio in the Sports Science and Physical Education domain • No major journals published in the Web of Science or Scopus databases, as well as a dearth of other journals which are indexed in other less prestigious databases such as ProQuest, DOAJ, etc. • Sloppily written self-evaluation report in English (certain performance indicators are mentioned without a direct link to annexes proving their fulfillment)
Opportunities	**Threats**
• Being able to leverage existing international partnerships and foster new ones • Organisation of more conferences and workshops to demonstrate UPIT's valuable contribution to solving pressing societal issues (enhanced communication towards employers, decision-makers, citizens, etc.) • Formation of new start-ups and spin-offs in engineering domains • International students as an important source of organisational culture transformation and new ideas • Increased academic staff and student mobility offers the potential for significant upgrading of skills and competences • New and increased financing options arising from Next Generation EU and the MFF 2021-2027	• Insufficient visibility and communication with regard to the domain's active role in international scientific projects • Low interest and enrollment rates in engineering and technical domains • Reduced state funding for PhD students, which students also confirmed in Google online poll • No formal alumni network that ensures an important feedback loop between academia and other stakeholders • Gradual decline in the number of students under the assumption of keeping *status quo* • Insufficient grants for research work of highly-talented students • The absence of a sleek and user-friendly web-page with plenty of information in English

		Too many students enrolled in the academic year 2020/2021, especially in domains with already unfavourable ratio of doctoral supervisors to students
• Embracing partnerships with domestic business and multinational corporations • Stronger intra-institutional exchange of ideas and research work via various research seminars and workshops • Stronger inclusion of employers' input into supervising committes' work where possible ("shadow co-mentoring")	•

V. OVERVIEW OF THE JUDGEMENTS AWARDED AND OF THE RECOMMENDATIONS

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
1.	PI	**A.1.1.1.** The existence of specific regulations and their application at the level of the IOSUD, respectively at the Doctoral School(s): a) the internal regulations of the administrative structures (the institutional regulations for the organization and conduct of doctoral studies programs, the regulation(s) of Doctoral School(s); b) the Methodology for conducting elections at the level of the Council of University Doctoral Studies (CSUD), respectively at Doctoral School(s) including elections by the students of their representatives in CSUD/Council of the Doctoral School (CSD) and the evidence of their conduct; c) the Methodologies for organizing and conducting doctoral studies for the admission of doctoral students, for the completion of doctoral studies); d) the existence of mechanisms for recognizing the status of a Doctoral advisor and the equivalence of the doctoral degree obtained abroad; e) functional management structures CSUD/Council of the Doctoral School with evidence of the regularity of meetings; f) the contract for doctoral studies;	**The indicator is fulfilled**	

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
		g) internal procedures for the analysis and approval of proposals about doctoral study programs based on advanced academic studies.		
2.	PI	**A.1.1.2.** The doctoral school' Regulation includes mandatory criteria, procedures and standards binding on the aspects specified in Article 17, paragraph (5) of the Government Decision No. 681/2011 on the approval of the Code of Doctoral Studies with subsequent amendments and additions.	**The indicator is fulfilled**	
3.	PI *	**A.1.1.3**. Doctoral schools included in IOSUD are organized as disciplinary or interdisciplinary disciplines/thematic, according to Article 158, paragraph (7) of the Law of National Education No. 1/2011 with subsequent amendments and additions.	**The indicator is fulfilled**	
4.	PI	**A.1.2.1.** The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic background.	**The indicator is partially fulfilled.**	
5.	CPI	**A.1.2.2.** The existence and use of a software program and evidence of its use to verify the percentage of similarity in all doctoral theses.	**The indicator is fulfilled**	
6.	PI	**A.2.1.1.** The IOSUD/the doctoral school(s) present proof of posessing or having rented adequate spaces for research activity specific to doctoral studies (laboratories, experimental fields, research stations etc.)	**The indicator is fulfilled**	
7.	PI	**A.2.1.2.** The IOSUD/doctoral school(s) has/have collaboration agreements with higher education institutions, research institutes, research networks for joint partnerships and have access for using various research infrastructures; the offer for research services is presented publicly using a dedicated platform.	**The indicator is fulfilled**	
8.	PI	**A.2.1.3.** The IOSUD/doctoral school(s) proves that it is/are concerned with permanent renewal of the research infrastructure to provide doctoral students access to up-dated research resources, by applying to various	**The indicator is fulfilled**	

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
		funding competitions and using own university resources for acquiring new research infrastructure.		
9.	PI *	**A.3.1.1.** The share of Doctoral advisors coordinating simultaneously more than 8 doctoral students but not more than 12 during their doctoral studies does not exceed 20%.	**The indicator is partially fulfilled.**	
10.	CPI	**A.3.1.2.** At least 50% of all teaching/research staff involved in teaching/research activities related to training programs for advanced university studies or in individual research/art creation programs have a full-time employment contract for an indefinite period with the IOSUD.	**The indicator is fulfilled**	
11.	PI *	**B.1.1.1.** Admission to doctoral study programs is based on selection criteria including: previous academic, research and professional performance, their interest for scientific or arts/sports research, publications in the domain and a proposal for a research subject. Interviewing the candidate is compulsory, as part of the admission procedure.	**The indicator is fulfilled**	
12.	PI	**B.1.1.2.** The IOSUD/doctoral school(s) have a policy for stimulating enrollment of doctoral students coming from disadvantaged social environments, by allocating reserved positions in the admission procedure and/or granting special scholarships, as well as organsing support programs to prevent drop-outs.	**The indicator is fulfilled**	
13.	PI	**B.2.1.1.** The training program based on advanced academic studies includes at least 3 disciplines relevant to the scientific research training of doctoral students; at least one of these disciplines is intended to study in-depth the research methodology and/or the statistical data processing.	**The indicator is fulfilled**	
14.	PI	**B.2.1.2.** At least one discipline is dedicated to Ethics and Intellectual Property in scientific research or there are well-defined topics on these subjects within a discipline taught in the doctoral program.	**The indicator is fulfilled**	

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
15.	PI	**B.2.1.3.** The IOSUD has mechanisms to ensure that the academic training program based on advanced university studies addresses "the learning outcomes", specifying the knowledge, skills, responsibility and autonomy that doctoral students should acquire after completing each discipline or through the research activities.	**The indicator is fulfilled**	
16.	PI	**B.3.1.1.** For the doctoral school there are in place mechanisms for valorification of the results of doctoral studies in accordance with the specificity of the particular domain (i.e. technologial transfer, products, patents in the case of exact sciences; products and services for social sciences and humanities; festivals, contests, recitals, sports competitions; cultural-arts orders in the vocational domain; presentations ar national and international conerences, publication of research results in national and international publications, engaging doctroal students in writing research-development projects etc.)	**The indicator is fulfilled**	
17.	CPI	**B.4.1.1.** At the level of IOSUD, the percentage of theses non- validated, at the level of General Council of the National Council for Attestation of University Degrees, Diplomas and Certificates (CNADTCU), without the right of further amendments and re-organizing the process of public defending, is not exceeding 5% in the last 5 years.	**The indicator is fulfilled**	
18.	PI	**C.1.1.1.** The IOSUD shall demonstrate the continuous development of the evaluation process and its internal quality assurance following a procedure developed and applied at the level of the doctoral school(s), the following assessed criteria being mandatory: a) the scientific work of Doctoral advisors; b) the infrastructure and logistics necessary to carry out the research activity; c) the procedures and subsequent rules based on which doctoral studies are organized; d) the academic and social services (including participation to various events, publication of papers etc.) and counselling made available to doctoral students.	**The indicator is fulfilled**	

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
19.	PI	**C.1.1.2.** Students' associations and, according to the case, representatives of students organise elections in the community of doctoral students, for positions in the CSUD, by universal vote, direct and secret, all doctoral studnets having the right of electing or being elected.	**The indicator is fulfilled**	
20.	PI	**C.1.1.3.** Students' associations and, according to the case, representatives of students organise elections in the community of doctoral students at the level of each doctoral school, for positions in the councils of doctoral schools, by universal vote, direct and secret, all doctoral students having the right of electing or being elected.	**The indicator is fulfilled**	
21.	PI *	**C.1.1.4.** Following the internal evaluation, IOSUD and the doctoral schools draft strategies and policies aiming to eliminate the identified deficiencies and to stimulate scientific and academic performance of IOSUD.	**The indicator is fulfilled**	
22.	CPI	**C.2.1.1.** The IOSUD publishes on the website of the organizing institution, in compliance with the general regulations on data protection, information such as: a) the IOSUD/Doctoral School regulation; b) the admission regulation; c) the doctoral studies contract; d) the study completion regulation including the procedure for the public presentation of the thesis; e) the content of the training study program based on advanced academic studies; f) the academic and scientific profile, thematic areas/research themes of the Doctoral advisors within the domain, as well as their institutional contact data; g) the list of doctoral students within the domain with necessary information (year of registration; Advisor); h) information on the standards for developing the doctoral thesis; i) information on the opportunities for doctoral students aiming to attend conferences,to publish articles, awarding scholarships etc.	**The indicator is fulfilled**	

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
		j) links to the doctoral theses's summaries to be publicly presented and the date, time, place where they will be presented; this information will be communicated at least twenty days before the presentation.		
23.	CPI	**C.2.2.1.** All doctoral students have free access to one platform providing academic databases relevant to the doctoral studies domain of the their thesis.	**The indicator is fulfilled**	
24.	PI	**C.2.2.2.** Each doctoral student shall have access, upon request, to an electronic system for verifying the degree of similarity with other existing scientific or artistic works.	**The indicator is fulfilled**	
25.	PI	**C.2.2.3.** All doctoral students have access to scientific research laboratories or other facilities depending on the specific domain/domains within the Doctoral School, according to internal order procedures.	**The indicator is fulfilled**	
26.	PI *	**C.3.1.1.** IOSUD, for every doctoral school, has concluded mobility agreements with universities abroad, with research institutes, with companies working in the field of study, aimed at the mobility of doctoral students and academic staff (e.g., ERASMUS agreements for the doctoral studies). At least 35% of the doctoral students have completed a training course abroad or other mobility forms such as attending international scientific conferences. IOSUD drafts and applies policies and measures aiming at increasing the number of doctoral students participating at mobility periods abroad, up to at least 20%, wich is the target at the level of the European Higher Education Area.	**The indicator is partially fulfilled**	
27.	PI	**C.3.1.2.** IOSUD supports, including providing financial support, to the organization of doctoral studies in international co-tutelage or invitation of leading experts to deliver courses/lectures for doctoral students.	**The indicator is partiially fulfilled**	
28.	PI *	**C.3.1.3.** At least 10% of the doctoral theses of every doctoral schools of the IOSUD are drafted and/or submitted in an international foreign language or are organised in international co-tutelage.	**The indicator is fulfilled.**	

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
29.	PI	**C.3.1.4.** The internationalization of activities carried out during the doctoral studies is supported by IOSUD through concrete measures (e.g., by participating in educational fairs to attract international doctoral students; by including international experts in guidance committees or doctoral committees etc.).	**The indicator is partially fulfilled**	
30.	PI	**C.4.1.1.** IOSUD, applies the current provisions regulating ethics, deontology/academic integrity, respectively to academic freedom and has developed: - policies based on prevention regarding possible violations of the Code of ethics and academic integrity, demonstrated by public postioinings, studies, analyses or measures taken; - practices and mechanisms for preventing fraud, from an institutional perspective as well as from the perspective of the doctoral students; - practices for preventing possible fraud in academic activity, research or any other activity, including active measures for preventing and avoiding plagiarism of any kind, as well as promoting ethical and integrity/deontology principles or observing intellectual property norms, authors' rights and other related rights, among all members of the academic community; - administrative instruments which allow applying effective and eliminatory sanctions; - mechanisms and measures to assure equal opportunities and protection against intolerance and discrimination of any kind; IOSUD monitors and permanently evaluates these practices and can prove they are applied to all activities and engagement of students in all these processes, and the results of the monitoring is made public yearly or whenever it becomes necessary.	**The indicator is fulfilled**	
31.	PI	**C.4.1.2.** All intimations regarding suspicion of plagiarism related to doctoral theses have been analysed and resolved by the IOSUD within the time interval legally established for	**The indicator is fulfilled**	

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
		expressing in writing its position regarding the intimation received.		
32.	PI	**C.4.1.3.** Annual Reports of the Ethics commission of the IOSUD contain information on the stage of solving each case of intimation or own-intiative intimation regarding violation of norms or ethical aspects relevant for university doctoral studies. description of the facts, the findings from the assessed institution's documents and the evaluation visit itself.	**The indicator is fulfilled**	
33.	CPI	**C.4.1.4.** The measures taken by IOSUD after the final decision of CNADTCU to withdraw the title of "doctor" following accusations of plagiarism have addressed all the aspects mentioned in CNADTCU's decision and in the current legislation.	**The indicator is fulfilled**	
34.	PI	**C.4.1.5.** The measures aiming to prevent academic fraud in the doctoral studies, taken by IOSUD, could be: a) Suspension of the right to advise newly enrolled doctoral students, for a period of 3 years, in the case of doctoral advisors having coordinated a doctoral thesis with a definitive decision of withdrawal of the "doctor" title for plagiarism; b) Exclusion from the IOSUD of the doctoral advisor having coordinated at least two doctoral theses with definitive decisions of withdrawal of the "doctor" title for plagiarism; c) Suspension of the right to organize the admission process of new doctoral students in the Doctoral studies domain, for a period of 2 years, if in the respective domain a doctoral thesis has been finalized and defended with a definitive decision of withdrawal of the "doctor" title for plagiarism.	**The indicator is fulfilled**	
35.	PI *	**C.4.1.6.** The scientific reviewers members in the commissions for public defense of two or more doctoral theses with definitive decisions of withrawal of the "doctor" title for plagiarism, have not been nominated in other commissions for public defence of doctoral theses for a period of at least 3 years.	**The indicator is fulfilled**	

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
36.	PI	**C.4.1.7.** IOSUD has a database open to the public containing all the doctoral theses defended in the institution beginning at least in 2016 in a format including: the domain, author, doctoral advisor, title of the thesis and the thesis in electronic format (if there is an agreement of the author).	**The indicator is fulfilled**	

Out of 36 performance indicators listed in the The External Evaluation Report of an Institution Organizing Doctoral Study Programs (IOSUD) (Annex 3) the IOSUD under evaluation fulfilled 31 of them. In the opinion of external reviewer there no fulfilled indicators, but there are five partially fulfilled indicators (A.3.1.1. A.1.2.1. ; C.3.1.1. ; C.3.1.2. ; C.3.1.4.). Apart from C.3.1.1. none of them are critical performance indicators. All recommendations on how to improve the listed performance indicators before the next evaluation are elaborated in the section III. ANALYSIS OF PERFORMANCE INDICATORS.

In an online Google poll 28 active doctoral students graded their satisfaction level of studying at the UPIT with an average grade 9,35 (on a Likert scale from 0-10). 16 graduates graded their study experience with an average grade 9,81. Their comments displayed very high satisfaction level with the way how the study process at the UPIT is organized. Finally, employers who also participated in an online poll (7 of them) graded their satisfaction with the competences of graduates with an average grade 9,57. The latter figures are not representative and may suffer from the bias of the self-selection of the sample. However, they provided plenty of information of what things might be improved in the way how teaching and research is being organised at the IOSUD.

The main recommendations for the IOSUD under evaluation is to focus on exploiting opportunities in the coming period in order to enhance its academic reputation and prestige, especially by far greater emphasis on internationalization, which is by far its weakest point. This means more foreign English-speaking students, more courses in English, more international co-tutelage of PhD theses, more mobility encompassing the most prestigious scientific institutions abroad, more scientific publications in English and improved web-page that represents the first contact point for any interested party from domestic or international setting. E.g. when clicking on some menus there are next to no information available to the interested party (e.g. relations with the socio economic environment). One of the key missing elements is the quality of scientific publications and the lack of visibility of the existing ones (The Scientific Bulletin).

According to the QS Ranking the UPIT takes only 4611th place among listed universities worldwide. Hence, the UPIT's management should set their sights higher and set a goal to climb a list by at least 300-500 places higher in the coming period.

Apart from focusing on the opportunities which the external reviewer identified in the SWOT analysis, there is also a suggestion to improve on the internal audit of programmes' execution. It is essential to collect and analyze key quantitative performance indicators such as the completion rate accross all domains, average study duration, the quantity and quality of realized academic exchange. Besides those quantitative indicators one should also collect qualitative data with regard to key reasons

behind e.g. students' decision to drop-out of the programme to reduce total social welfare loss. Students are being supported financially when publishing scientific research or participating in mobility programmes. However, some students that took part in Google online poll stated that this support should be even higher. Therefore, one should consider how to additionally stimulate top 10% of students.

With regard to programmes offered at the UPIT, it is commendable that the IOSUD offers a diversified list of programmes in many domains. However, this can also serve as a potential threat if human resources do no go hand in hand with those programmes. If one wants to pursue the path of rising excellence, one has to think of a better strategy how to to attract young, ambitious and talented doctoral supervisors, especially in domains with low number of PhD students': Interdisciplinary, Automotive Engineering, Mathematics, Informatics, Mechanical Engineering, etc. In the long run, in order to demonstrate higher standards of academic excellence one has to either specialize resources in domains that offer the biggest scientific impact and financial contribution, or increase the overall resources that are then distributed accross all domains. In that context, the rapid increase of the number of students enrolled, as well their composition in academic year 2020/2021, could represent a drawback in the long run.

Furthemore, it would be highly recommendable to grade PhD thesis to make a better distinction between the exceptional ones and the ones that just conform to minimal standards. The external reviewer found only two categories of grades for 58 thesis that were validated (very good and good). Collecting and publicly providing data on the number of defended these in each of the categories (rite, cum laude, magna cum laude i summa cum laude) would be a step in the right direction to strengthen meritocratic principles.

Finally, the IOSUD could profit from relying on a standardized form for key performance indicators for every single domain and research centre which would significantly simplify evaluation procedure. It would also make the communication of their main achievements far more effective. E.g. these would include the number of citations, projects, patents, grants achieved between two evaluations. Hence, apart from obtaining an insight into total achievements since the measurement started, external experts would also welcome an insight into relative change (delta), in order to assess the pace and direction of change across multitude of indicators.

After pondering all pros and cons with regard to the IOSUD under evaluation, the reviewer recommends that the programme is accredited for the duration of five years since there were no more than 12 performance indicators, that have not been either partially or fully met fulfilled.

VI. CONCLUSIONS AND GENERAL RECOMMENDATIONS

The UPIT as an IOSUD under evaluation represents a small but aspiring University that displays more streghts as opposed to identified weaknesses. Hence, the overall performance could be labelled as relatively solid, with positive outlook for future improvements, especially the ones identified as opportunities. However, there are multiple opportunies at hand that are more than enough to counterbalance any of the identified threats, as listed in the SWOT analysis above. . We hope that our suggestions will be helpful in raising the programme's overall quality over the next five years, in order to contribute to better positioning of the UPIT on the list of leading universities in Romania, and by making an important step towards greater prominence of its programmes, research, supervisors

and students in European Higher Education Area, thereby creating a virtuous cycle of academic excellence.

VII. ANNEXES

No annexes.

SIGNATURE

In Zagreb, 3rd of December 2021

Kristijan Kotarski, PhD

Associate Professor in International Political Economy. University of Zagreb, Croatia