EXTERNAL EVALUATION REPORT – "VALAHIA" UNIVERSITY OF TÂRGOVIȘTE IOSUD evaluation

I. INTRODUCTION

The "Valahia" University of Târgovişte (later in the text UVT) is a university in Târgovişte, Dâmboviţa County, Romania. At the UVT the IOSUD was established by the Decision of the UVT Senate no. 105D of March 9, 2012. There are two doctoral schools within IOSUD, the structure not being modified as compared to the moment of IOSUD's foundation. Doctoral School of Economics and Humanities (hereinafter referred to as SDSEU), comprises fields: History, Accounting and Management. The SDSEU comprise 23 doctoral supervisors (11 in history, 5 in accounting and 7 in management). Doctoral School of Engineering Sciences (hereinafter referred to as SDSI), comes with the fields: Materials Engineering, Electrical Engineering and Mechanical Engineering. The Doctoral School is coordinated by the director of the Doctoral School and the Doctoral School Council (CSD). The SDSI is composed of 12 supervisors (5 in materials engineering, 4 in electrical engineering and 3 in mechanical engineering).

The University boats 17 research centres to which doctoral students have access and which provided a list of recent achivements. Apart from having access to those research centres, doctoral students at the UVT can also rely on further options through collaboration agreements with national institutes (e.g. National Institute of Research and Development for Mechatronics and Measurement Technique - INCDMTM, National Institute of Research and Development for Chemistry and Petrochemistry - ICECHIM Bucharest or IT Center for Science and Technology CITST Bucharest).

The UVT as an IOSUD publishes several journals - Revue du Valachia d'Etudes Economiques - in French and Wallachian Journal of Economic Studies, The Scientific Bulletin of Electrical Engineering Faculty and The Scientific Bulletin of Wallachia University Materials and Mechanics - in English. The last two are BDI indexed by De Gruyter. Additionally, Journal of Science and Arts is the ISI indexed journal.

During the process of external evaluation the academic staff and IOSUD's management were quite open in their communication, apart from the representatives of the domain of management that should be more forthcoming in delivering required materials, as requested by external reviewer.

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 UVT as an IOSUD was conducted on behalf of the evaluation team composed of: Prof. Danciulescu Daniela (Universitatea din Craiova), Associate Professor Kristijan Kotarski (University of Zagreb) and Petrila Larisa-Maria (PhD student). We shall add to this list: IOSUD expert for Economic Sciences, Prof. Dobrin Cosmin, IOSUD expert for Humanities and arts, Prof. dr. Gligor Mihai; IOSUD expert for Engineering sciences, Prof. Vizureanu Petrica. Mrs. Carmen Sirbu of the Universitatea Danubius din Galați served as a technical secretary. The evaluation started on 8th of November and ended on 12th 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. There were no major anomalies detected and all functioning mechanisms are in place. In **Annex 24** and **Annex 25** there are to be found Regulations, Methodologies, Procedures, Formulations which extensively cover the matter. **The performance 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. **Annex 25** provides contains a list of documents that confirm the following items:
- a. the acceptance of new leading members of the doctorate is regulated in Art. 7.1, and the withdrawal of the quality of member of the doctoral school in Art. 7.2;
- b. the training program based on advanced university studies is regulated in Art. 8-Art. 10;
- c. the change of the doctoral supervisor is discussed in Art.13.7-13.9, and the mediation of conflicts in Art. 13.5-13.6;
- d. the interruption of the doctoral program is established at Art.14.3-14.6; 19
- e. the prevention of fraud in scientific research, including plagiarism is discussed in Art. 13.10-13.12, Art. 20.17;
- f. the access of doctoral students to research and documentation resources is provided in Art. 11.3; Article 15.g;
- g. in Art. 17. 2 it is specified that the doctorate at SDSI is full-time or part-time, and in Art. 15.2.b it is specified that the doctoral student must carry out the activities provided in the individual plan of doctoral studies under the conditions of frequency set by the doctoral supervisor The 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 in the Introduction there are two doctoral schools within IOSUD, the structure not being modified as compared to the moment of IOSUD's foundation. Doctoral School of Economics and Humanities (hereinafter referred to as SDSEU), comprises fields: History, Accounting and

Management. The SDSEU comprise 23 doctoral supervisors (11 in history, 5 in accounting and 7 in management). Doctoral School of Engineering Sciences (hereinafter referred to as SDSI), comes with the fields: Materials Engineering, Electrical Engineering and Mechanical Engineering. The performance 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 UVT uses the University Management System, an integrated software product developed by Red Point Software Solutions (https://rpss.ro/ro_RO/products/university-management-system/). The software covers complete life-cycle of studying at the UVT, from the admission untill the final completion of doctoral studies on behalf of students. **The performance indicator is 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. All doctoral theses are verified, since 2016, with www.sistemantiplagiat.ro Sistemantiplagiat.ro is a program for detecting the similarity of texts created in 2002 by the Polish company Plagiat.pl, launched in Romania in 2012. It is especially praiseworthy that the UVT aggregates similarity score for all defended PhD thesis and communicates it in a straighforward way, especially in areas where scientific contribution is sometimes harder to identify such as in domains of Accounting, Management and History. Nevertheless, in spite of having the aura of 'hard science', the same should be provided in the future for all PhD theses in all engineering domains. **The performance 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 and multiple illustrations of the existing facilities and equipment. That equipment is mostly procured over the timespan of last five years so it is cutting-edge and new. The University boasts also a lot projects but they should be even more ambitious in the future in terms of allocated sums from external (especially international sources). 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.

There is a sufficient number of collaboration agreements with Romainan institutes and private sector companies, especially multinationals. Everything is clearly presented in the **Annex 19**. 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 responsible approach towards procuring scientific equipment, financed from various sources. 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%.

The table on page 21 of the self-evaluation report correctly and transparently states that the percentage of doctoral advisors coordinating simultaneously more than 8 doctoral students but not more than 12 during their doctoral studies amounts to 37,14%, which above the threshold of 20%. The data are even disaggregated per every single domain. As of this writing there is no doctoral supervisor in the engineering domains that is overburdened (having more than 8 but not more than 12 doctoral students). On the other hand, in the domain of Accounting all doctoral supervisors fit into this category. In the domain of management all doctoral supervisors have more than 8 doctoral students, and five of them have significantly more than 12 students. Finally, in the domain of History, 2 doctoral supervisors (20% of them) currently supervise 12 students. The presentation of a clear roadmap to tackle this problem in the future is a very welcome sign but as of this writing this performance indicator is partially fulfilled.

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.

Annex 12 contains all the required documents which show that the share of teaching staff possessing full-time employment contract is 59.42% (41 out of 69). **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 IOUSUD under evaluation has a competitive enrollment procedure which takes into account past achievements and future research plan, especially with regard to topics pursued by applicants. The topics are given on behalf of every single supervisor for every single domain and they can be found on the Doctoral school's website. All procedures pertained to admission are communicated in a clear manner. 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.

As is elaborated in the self-evaluation report "during the evaluation period, 7 places were allocated for admission to candidates from disadvantaged social backgrounds (Roma) as follows: 2 places in 2017-2018, 2 places in 2018-2019, 2 places in 2019-2020, 1 place in 2018- 2019." 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.

The IOSUD under evaluation offers the minimally required number of disciplines relevant to the scientific research training in the domains of accounting, management and history: Scientific research methodology, Ethics and academic integrity and respectively, Econometric and statistical methods used in scientific research. For the domains of electrical, materials and mechanical engineering students are offered five disciplines: Research Methodology, three specialized disciplines proposed by the doctoral supervisor and Ethics and academic integrity. Everything is listed and explained in detail in Annex 9. The indicator is fulfilled.

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 in the first semester of the first year Ethics and academic integrity, a discipline that ends with a colloquium. This can be seen from syllabus incorporated in the **Annex 9**. 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.

In the **Annex 9** it was observed that all syllabuses covering all courses are standardized according to the Quality Management System guidelines. Learning outcomes are clearly stipulated, students' obligations and rights are defined and the required bibliography is elaborated in detail. **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 both doctoral schools 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 doctoral students in writing research-development projects etc.)

Annex 18 contains all the relevant materials which show key scientific achievements on behalf of doctoral students at the UVT. It is noticeable that engineering domains have far more ISI articles published in highest ranking quartiles (Q1 and Q2), as opposed to accounting, management and history domains. External reviewer recommends increased scientific production of articles in Q1 and Q2 for the latter domains. Nevertheless, 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.

There is only one doctoral thesis that out of 160 of them defended at the UVT over the last five years that has been invalidated, which is less than 0,6%. The IOSUD applies rigorous plagiarism check and this ensures that the incentive to cheat and engage in plagiarism are reduced to the minimum. Therefore, the indicator is fulfilled.

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.

During the interviews with the IOSUD's representatives it was confirmed that there exists a Quality Commission and quality manager, Professor Mihai Meila. CNATDCU's standards are applied across the board which facilitates the comparison among supervisors. It would be 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. Therefore, 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 students having the right of electing or being elected.

In an interview with representatives of the UVT'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 5**. Hence, **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.

What was said in the passage above with regard to the fulfillment of the performance indicator C.1.1.2 can be also said about the following indicator, C.1.1.3. **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

When it comes to strategies and policies aiming to eliminate the identified deficiencies this could be only confirmed with regard to History and Electrical Engineering domains. The external reviewer was not presented with the similar documents covering other domains. Therefore, the indicator is partially 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 recommends to translate and publish those documents in English as a part of its internationalization campaign. 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 <u>www.sistemantiplagiat.ro</u> 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 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 25 and Annexes 19.1a and 19.1b. 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 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 fulfillment of this performance indicator is explained for every doctoral domain in detail. Every domain excedeed the minimum threshold of 35%. **Annex 23** is a testament to this claim. **The indicator is fulfilled.**

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.

The IOSUD has provided ample evidence that this indicator has been met but in the future the expectations and goals should be set higher to increase the numbers elaborated in the self-evaluation report. There were 7 doctoral theses defended under the international co-tutelage. Lecture series, roundtables, and conferences were hosted by the UVT. All in all, the indicator is 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.

There were 160 theses defended in the evaluated period. 133 in the SDSEU and 27 in the SDSI. Of these, 7 are written and / or presented in a language of international circulation or co-written. The percentage is 4.51% for SDSEU and 3.70% for SDSI. Therefore, none of the doctoral schools meets the 10% target set by the ARACIS. In the future, this is one of the key steps to increase the scientific reach on behalf of the IOSUD under evaluation. This indicator is partially fulfilled since the IOSUD is gradually on track to meet the goal by the time of next evaluation.

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).

At a minumum, one can say that this indicator has been met. However, more ambitious steps are expected in the future to make a progress. First and foremost that means attracting more foreign students and offering more courses in English to be able to achieve the former goal. On the other hand, there is a well-established evidence that the IOSUD's representatives participated in international fairs to attract foreign students. Foreign experts have also been included in guidance committees. In spite of some downsides identified above, this indicator has been 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;

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.

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. This indicator has been 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.

Annex 20 showcases that three doctoral theses were under suspicion of plagiarism during the evaluated period. After thorough analysis none of them were invalidated. **This indicator has been 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.

Ethics Commission reports for the years 2016, 2018 and 2020 are available for the IOSUD activity in the evaluated period. This indicator has been 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.

During the evaluated period there are no doctoral theses invalidated due to plagiarism. Antiplagiarism culture is strongly rooted at the level of IOSUD. The reviewer undestood that only one PhD thesis was invalidated in March 2021, which is does not fit into the period under evaluation. Hence, this indicator has been 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.

As an external reviewer I can only repeat the words written in the self-evaluation report "The regulations of the doctoral schools (reg. SDSI / SDSEU art. 7.2.b) provide for the exclusion of doctoral supervisors as a result of the violation of the Code of Ethics and Deontology of UVT in case of possible academic frauds, violations of university ethics or deviations from good conduct in scientific research, including plagiarism." In an interview with the academic staff, IOSUD's management and doctoral school councils, there was no mention of any case whereby misconduct led directly to the expulsion. This indicator has been 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 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.

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).

All informations covered within this indicator are retrievable from the https://www.scoaladoctorala.valahia.ro/sustineri-teze/management/. It is commendable that for every thesis there is also a short summary. 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 indicator has been fulfilled.

IV. SWOT ANALYSIS

Strenghts Weaknesses Dedicated and pretty well-trained No courses taught in English which academic staff immersed into broader hampers effective internationalization social environment Lack of strategic documents written in Possesing European Charter for Higher English Education 2021-2027, granted by the Unsatisfactory level of openness to European Commission, which is a international students as a proxy for testament to the good smooth internationalization functioning of academic exchange Large imbalance in the number of programmes doctoral students in the domains Existing research centres, some of comprising social sciences versus which embody an example of academic students enrolled in the engineering excellence such as Nanomaterials domains (unfavourable student to Research Center for Mechanical professor ratio in the domain of Microsystems management) Publication of four academic journals, Relatively low H-index of doctoral some of which are ISI journals supervisors (Web of Science) in all

programmes at the UVTAppropriate research infrastructure

Significant level of students' and

graduates' satisfaction with doctoral

- Good communication and cooperation between supervisors and doctoral students
- Solid partnerships with other research and education institutions in Romania
- High number of research centres at the level of University
- 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, especially important ones such as Strategy 2020-2024)
- Relatively favourable budgetary developments in the years preceding the COVID-19 pandemic

- Relatively low H-index of doctoral supervisors (Web of Science) in all domains expect in Electrical Engineering and Mechanical Engineering
- Initial lack of coherent and systematic communication of major scientific achievements to various stakeholders and external reviewers (research impact of publications such as the number of citations, type of patents)
- Falling research output for some doctoral supervisors, as evidence by their Google Scholar profile
- No Google Scholar profiles for a minority of doctoral supervisors
- Falling number of PhD theses defended in engineering domains over the period of last five years, as opposed to the number of theses defended in social science domains

Opportunities Threats

- Being able to leverage existing international partnerships and foster new ones
- Improvement in funding options and research reputation by applying for more internationally prestigious and competitive projects such as Jean Monnet Centres of Excellence
- Organisation of more conferences and workshops to demonstrate UVT's valuable contribution to solving pressing societal issues (enhanced communication towards employers, decision-makers, citizens, etc.)
- Greater inclusion of doctoral students in the work of scientific centres within the domain
- 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
- Launch of a new doctoral programme in ICT
- Active role in the European Universities consortium which might significantly refresh the existing structures and bring new ideas and research opportunities
- Embracing partnerships with leading corporations such as Renault and Schneider
- Creating a more compact and formalized alumni network for PhD students

- Insufficient internationalization and positive competitive pressures arising from it
- COVID-19 impact on the existing financial structure, especially with regard to research grants
- Poor visibility and communication with regard to the domain's active role in international scientific projects
- Low enrollment rates in almost all engineering domains
- Decreasing number of defended PhD theses in the engineering domains
- Unability to attract foreign students due to next to no-existing course lis taught in English

V. OVERVIEW OF THE JUDGEMENTS AWARDED AND OF THE RECOMMENDATIONS

No.	Type of	Performance indicator	Judgment	Recommendations
	indicator (PI, PI *,			
	CPI)			
1.	PI	A.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; g) internal procedures for the analysis and approval of proposals about doctoral study programs based on advanced academic studies.	The indicator is fulfilled	
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	

No.	Type of	Performance indicator	Judgment	Recommendations
	indicator			
	(PI, PI *, CPI)			
4.	01 11			
	PI	A.1.2.1. The existence and effectiveness of an	The	
		appropriate IT system to keep track of doctoral students and their academic background.	indicator is fulfilled	
5.		stadents and their adadentic background.	Turrinea	
	CPI	A.1.2.2. The existence and use of a software	The	
		program and evidence of its use to verify the percentage of similarity in all doctoral theses.	indicator is fulfilled	
6.		percentage of similarity in an doctoral theses.	Turrinea	
	PI	A.2.1.1. The IOSUD/the doctoral school(s)	The	
		present proof of posessing or having rented adequate spaces for research activity specific	indicator is fulfilled	
		to doctoral studies (laboratories, experimental	Tullilleu	
		fields, research stations etc.)		
7.	PI	A.2.1.2. The IOSUD/doctoral school(s)	The	
	• • •	has/have collaboration agreements with	indicator is	
		higher education institutions, research	fulfilled	
		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.		
8.	PI	A.2.1.3. The IOSUD/doctoral school(s) proves	The	
		that it is/are concerned with permanent	indicator is	
		renewal of the research infrastructure to	fulfilled	
		provide doctoral students access to up-dated research resources, by applying to various		
		funding competitions and using own university		
		resources for acquiring new research		
9.		infrastructure.		
•	PI*	A.3.1.1. The share of Doctoral advisors	The	
		coordinating simultaneously more than 8	indicator is	
		doctoral students but not more than 12 during their doctoral studies does not exceed 20%.	partially fulfilled.	
10.				
	CPI	A.3.1.2. At least 50% of all teaching/research staff involved in teaching/research activities	The indicator is	
		related to training programs for advanced	fulfilled	
		university studies or in individual research/art		
		creation programs have a full-time		
		employment contract for an indefinite period with the IOSUD.		
11.				
	PI*	B.1.1.1. Admission to doctoral study programs	The indicator is	
		is based on selection criteria including: previous academic, research and professional	fulfilled	
		r protocolonal		

No.	Type of	Performance indicator	Judgment	Recommendations
	indicator (PI, PI *,			
	CPI)	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.		
12.	PI	B.1.1.2. The IOSUD/doctoral school(s) have a	The	
		policy for stimulating enrollment of doctoral	indicator is	
		students coming from disadvantaged social environments, by allocating reserved positions	fulfilled	
		in the admission procedure and/or granting		
		special scholarships, as well as organsing		
13.		support programs to prevent drop-outs.		
	PI	B.2.1.1. The training program based on advanced academic studies includes at least 3	The indicator is	
		disciplines relevant to the scientific research	fulfilled	
		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.		
14.	PI	B.2.1.2. At least one discipline is dedicated to	The	
		Ethics and Intellectual Property in scientific	indicator is	
		research or there are well-defined topics on these subjects within a discipline taught in the	fulfilled	
15		doctoral program.		
15.	PI	B.2.1.3. The IOSUD has mechanisms to	The	
		ensure that the academic training program	indicator is	
		based on advanced university studies addresses "the learning outcomes", specifying	fulfilled	
		the knowledge, skills, responsibility and		
		autonomy that doctoral students should acquire after completing each discipline or		
10		through the research activities.		
16.	PI	B.3.1.1. For the doctoral school there are in	The	
		place mechanisms for valorification of the results of doctoral studies in accordance with	indicator is fulfilled	
		the specificity of the particular domain (i.e.	runneu	
		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,		

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
		engaging doctroal students in writing research- development projects etc.)		
17.	СРІ	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	
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 students 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	The indicator is partially fulfilled	

No.	Type of indicator (PI, PI*, CPI)	Performance indicator	Judgment	Recommendations
	•	scientific and academic performance of IOSUD.		
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. 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.	The indicator is fulfilled	
23.	СРІ	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.	Pl	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	

No.	Type of	Performance indicator	Judgment	Recommendations
	indicator			
	(PI, PI *, CPI)			
26.	,			
	PI*	C.3.1.1. IOSUD, for every doctoral school, has	The	
		concluded mobility agreements with universities abroad, with research institutes,	indicator is fulfilled	
		with companies working in the field of study,	Tullilleu	
		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		
27.		Education Area. C.3.1.2. IOSUD supports, including providing		
21.	PI	financial support, to the organization of doctoral	The	
		studies in international co-tutelage or invitation	indicator is	
		of leading experts to deliver courses/lectures for doctoral students.	fulfilled	
28.		TOT GOCGIAI STUDENTS.		
	PI*	C.3.1.3. At least 10% of the doctoral theses of	The	
		every doctoral schools of the IOSUD are drafted and/or submitted in an international	indicator is partially	
		foreign language or are organised in	fulfilled.	
		international co-tutelage.		
29.	PI	C.3.1.4. The internationalization of activities	The	
		carried out during the doctoral studies is	indicator is	
		supported by IOSUD through concrete	fulfilled	
		measures (e.g., by participating in educational fairs to attract international doctoral students;		
		by including international experts in guidance		
		committees or doctoral committees etc.).		
30.	PI	C.4.1.1. IOSUD, applies the current provisions	The	
		regulating ethics, deontology/academic	indicator is	
		integrity, respectively to academic freedom	fulfilled	
		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		

No.	Type of	Performance indicator	Judgment	Recommendations
	indicator			
	(PI, PI *,			
	CPI)	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.		
31.				
	PI	C.4.1.2. All intimations regarding suspicion of plagiarism related to doctoral theses have	The indicator is	
		been analysed and resolved by the IOSUD	fulfilled	
		within the time interval legally established for		
		expressing in writing its position regarding the		
		intimation received.		
32.	PI	C.4.1.3. Annual Reports of the Ethics	The	
	''	commission of the IOSUD contain information	indicator is	
		on the stage of solving each case of intimation	fulfilled	
		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.		
33.	65'	0.444 The second of the second	T1.	
	CPI	C.4.1.4. The measures taken by IOSUD after the final decision of CNADTCU to withdraw	The indicator is	
		the title of "doctor" following accusations of	fulfilled	
		plagiarism have addressed all the aspects		
		mentioned in CNADTCU's decision and in the		
		current legislation.		

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
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	
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 UVT fully meets 33 of them. There are only three partially fulfilled performance indicators. In the opinion of external reviewer there exists a lack of clarity with regard to one performance indicator that is only partially fulfilled (C.1.1.4.). Performance indicators C.3.1.3. and A.3.1.1. are also partially fulfilled, as underlined by delivered materials. The main reason for this kind of assessment is the lack of systematic reporting of all mobilities across all domains and generations of students, in order to ensure verified reporting. Furthermore, the results of students' evaluations across all domains, as well as strategies and policies aiming to eliminate the identified deficiencies and stimulate scientific and academic performance

should be presentable and available to external experts. It would be recommendable to think of ensuring the availability of those strategies and policies in English. Finally, UVT's own self-evaluation report identifies two indicators which are not fulfilled (A.3.1.1. and C.3.1.3). One of the weaknesses of the IOSUD under evaluation is the modest degree of internationalization, which is reflected in the failure to meet the performance indicator C. 3.1.3.. In the coming years doctoral students should be encouraged to publish significantly greater percentage of PhD theses in English.

In terms of financial contraints for ensuring high-quality research and teaching the external reviewer did not find significant hurdles. Apart from the impact of the COVID-19 pandemic which reduced the total revenues by 10%, there is a clear upwards trend in total revenues in the period from 2016-2019, with a total increase of 72%. A very commendable part of the financial structure found at the UVT is a remarkable increase in the amount of financial means derived from various national and international research projects and grants. During the period from 2016 to 2019 there is an increase of more than 140%. Only the pandemic year of 2020 put a dent in the amount collected from the aforementioned source and the share from research grants in total revenue of the UVT fell from 20,95% to 14,63%. The share of doctoral study fees in total tuition fees has remained stable over the whole period. The recommendation on behalf of the external reviewer is to increase the amount of funding from privately-funded tuition fees, especially from foreign students. This won't change significantly the financial structure of the UVT but represents a standard feature of internationalization and of a growing partnership with private and public sector institutions beyond the confines of the UVT.

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. The first step in the direction of being one of the nods in the European Universities consortium is a welcome sign but it has to be far more ambitious with regard to attracting foreign PhD students and winning more prestigious ERASMUS+ projects. According to the QS Ranking the UVT takes only 4736th place among listed universities worldwide. Hence, the UVT'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. Furthemore, it would be highly recommendable to grade PhD thesis to make a distinction between the exceptional ones and the ones that just conform to minimal standards. 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, there should be a standardized form for key performance indicators for every single domain and research centre which would significantly simplify evaluation procedure and 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.

Overall, 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

fulfilled at all. Even more essential is the that IOSUD under evalution fulfills all critical performance indicators.

VI. CONCLUSIONS AND GENERAL RECOMMENDATIONS

The UVT as an IOSUD under evaluation represents a small but aspiring University that boasts more streghts as opposed to identified weaknesses. Hence, the overall performance could be labelled as satisfactory. 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 UVT 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, Croatia, 29th of November 2021

Kristijan Kotarski, PhD

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