

STATEMENT

On the Dissertation Work

„RESEARCH INFORMATION SYSTEM SERVICES FOR THE OPEN SCIENCE CLOUD “

created for the purpose of acquiring the educational and science degree “Doctor” in the field of Informatics and computer sciences (information and communication technologies in education)

by PhD Applicant: **Silvester Hasani,**

Supervisor: **Prof. Eliza Stefanova, FMI, Sofia University**

Higher education area: **4. Natural sciences, mathematics and informatics /**

Professional specialisation: **4.6. Informatics and computer science**

Part-time doctoral programme in **Information Technologies - Computer Networking**

at the **Information Technologies Department,**

Faculty of Mathematics and Informatics,

Sofia University St Kliment Ohridski,

This statement was prepared by Assoc. Prof. Milena Petrova Dobreva, PhD, Faculty of Mathematics and Informatics, Information Technologies department, a member of the scientific jury appointed by the Rector of Sofia University.

1. General description of the dissertation and accompanying materials

The submitted thesis of 120 pages consists of five chapters, an Appendix (Questionnaire), 19 figures and 20 tables. The bibliography lists 55 sources including publications and web-pages.

The thesis is written in English. The research within the dissertation had been covered in four publications; in all of them Mr. Hassani being the first author. Declarations of co-authorship for each article state that all authors contributed equally to the corresponding publications.

The layout and the illustrations are suitable and clear. The text is mostly written in good English with some minor remaining issues, e.g. the title of Chapter 3 reads “The current state of Open Science in Balkan”. These do not harm the understanding of the research and the outcomes.

It is worth noting that the author also took into consideration the feedback from the discussion of his dissertation, including an expanded literature and illustrations.

2. Research context and focus. Structure of the dissertation

The main focus of the research is on the analysis of the current situation and measures which could support the advancement of Open Science use in the Balkan states. The approach of the author is interdisciplinary and combined a desktop research on the current state of the wider European landscape, a comparative study of attitudes and developments in Albania and Bulgaria and a practical development of a prototype for an Albanian open science repository. The challenges of this research is the fast pace of developments in open science. While the lack of previous systematically collected data on the situation in the Balkan states is a challenge, it is also an opportunity to contribute new knowledge which can support a better understanding of the current state and help develop policies and strategies for boosting open science advancement in a region which is still not taking full benefit of it.

The PhD candidate demonstrates an excellent level of background knowledge and insights into the domain of open science.

The five chapters of the dissertation follow a good logical order and gradually build a consistent picture of the research. The first chapter introduces the importance of open science and present the discrepancy between EC guidance and practices and missing or insufficient infrastructures on the Balkans. The second chapter provides a literature review which identifies the major trends in open science and explore in particular details the issues around the technological infrastructures which support the collection, visibility and use of open outcomes of scientific research.

The third chapter explores the transition to open science. The survey method was used to collect data on Albania and Bulgaria as a basis for comparative analysis of the perceptions of academics.

The fourth chapter provides a clear description of the work on a prototype of an Albanian repository. Finally, the fifth chapter provides conclusions and recommendations.

In general, the dissertation is positioned with a timely and fast developing domain of the wider adoption of open science practices. It brings together for the first time some comparative data on the situation in Bulgaria and Albania. While the wider ambition to assess the situation on the Balkans had not been developed thoroughly, these glimpses are helpful to get a feeling on the type of issues this region is experiencing and this makes the research a good basis for extending into the wider region in the future.

3. Personal observation on the candidate

Due to the Covid pandemic and the part-time mode of research I did not have an opportunity to meet the candidate in person but I attended some events where he presented his

research. The presented background materials support the impression of his thorough and long-standing interest in the domain and what is particularly impressive is his clear intention to make a difference and leave a mark on the domain. His work demonstrates this potential crystallised also in the practical work on the prototype of an Albanian repository.

Not being personally familiar with Mr Hasani, I am convinced his background knowledge is broad and also his potential for driving impact on the open science domain on a national level in Albania is impressive.

4. Results

The publications of the author accompanying the dissertation allow me to accept the formulated research and application achievements which combine analysis of the open science landscape particularly in Albania, the development of a repository and a policy for open science in Albania.

5. Approbation of the results

The applicant had presented four publications reflecting the dissertation research. Two of them are visible in the worldwide research base „Scopus“.

The publications of Mr Hasani meet the requirements for the research and educational degree “Doctor” in the research domain 4.6.

6. Quality of the extended abstract

The extended abstract meet the requirements and contain the main information presented in the dissertation.

7. Critical notes and recommendations

I have to minor recommendations:

- A. The mixed methodology of the research had been appropriately followed and the connection between the different methods are mostly clear. However, in some cases it would be beneficial to explain in more details how the outcomes relate to each other, e.g. how the results of the survey for example helped to shape the repository.
- B. The accompanying explanations on the repository are of good quality. It would also be beneficial to illustrate the typical user journeys for academics depositing and searching for materials and to build a more comprehensive strategy to attract more deposits.

8. Conclusion

After exploring the dissertation and the accompanying materials and based on their quality and practical value, I am **confirming**, that the dissertation and the research results are meeting the requirements for awarding a PhD degree in the domain 4.6. Informatics and computer science. In particular, the applicant is meeting the national requirements and there are no indications of plagiarism.

Taking this into consideration, I am **recommending** the scientific jury to award Mr Silvester Hasani the educational and scientific degree “doctor” in the domain 4.6. Informatics and computer science.

27.07.2022 г.

Statement prepared by:

(Dr Milena Dobрева, Assoc. Prof.)