



A R A C I S

Romanian Agency for Quality Assurance in Higher Education

External Institutional Evaluation

Universitatea Tehnică din Cluj-Napoca, România

Foreign Expert Report

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em.Univ.-Prof.Dr. Winfried Müller
Alpen-Adria-Universität Klagenfurt, Austria
Former Rector

Peer of several
European Quality Assurance Agencies

1. Introduction

This report summarizes my impressions as Foreign Expert from the visit to the Technical University of Cluj-Napoca / Universitatea Tehnică din Cluj-Napoca (TUCN) for an external institutional evaluation by ARACIS from May 23 to 25, 2018. Beside the institutional evaluation, 14 study programmes in Cluj-Napoca, 3 in Baia Mare and 1 in Alba-Iulia were elected for assessment too. This visit follows to the institutional evaluation of TUCN by ARACIS in 2013, when the institution received the High Confidence degree.

During the last 18 years, I have participated already in nearly 50 evaluations of Higher Education Institutions in nine European countries, in Colombia and in Nigeria. Hence, the following observations and comments will not only reflect my experiences with TUCN but also give international perspectives. My focus is on the institution as a whole and not so much on individual study programmes.

I am very grateful to the Mission Director Prof.univ.dr. Anton Hadăr and the Mission Scientific Coordinator Prof.univ.dr. Dumitru Miron for conducting this evaluation process in a very friendly and efficient way and to all members of the ARACIS team for their constructive and fruitful discussions during the visit. My special thanks go to the Technical Secretary Mr. Mihai Marcu from ARACIS for giving me the opportunity to participate in this interesting evaluation and for his friendly way of providing all necessary information. I also give my cordial thanks to the Rector Prof.univ.dr. Vasile Țopa for the friendly welcome and to the Prorector Prof.univ.dr. Daniela Popescu, who welcomed me at the airport and organized my visit in a perfect way. I am also very committed to Lector dr. Sanda Pădurețu from TUCN who assisted me with translations and organisational tasks during the whole visit and contributed considerably to a good understanding of the institution by answering numerous questions. Furthermore, I want to express my appreciation to the various persons including students, who have actively participated in the meetings during the visit.

2. Organisational Details of the Technical University of Cluj-Napoca

The origin of the Technical University of Cluj-Napoca goes back to the Industrial Institute of Higher education founded 1920 in Cluj. This Institute was renamed to Cluj Polytechnic Institute in 1953. Finally, in 1992 the Polytechnic School changed its name becoming the Technical University of Cluj-Napoca (TUCN). In 2012 TUCN merged with the North University of Baia-Mare. At present TUCN operates in Cluj-Napoca and Baia Mare and has branches in Alba Iulia, Bistrița, Satu Mare and Zalău. Today TUCN is one of the leading Romanian universities of high national and international reputation in teaching and research.

The University is structured in 12 faculties, 9 in Cluj-Napoca (Faculty of Architecture and Urban Planning, Faculty of Automation and Computer Science, Faculty of Civil Engineering, Faculty of Machine Building, Faculty of Electronics, Telecommunications and Information Technology, Faculty of Electrical Engineering, Faculty of Materials and Environmental Engineering, Faculty of Building Services, Faculty of Mechanical Engineering) and 3 in the North University Centre in Baia Mare (Faculty of Engineering, Faculty of Humanities, Faculty of Sciences).

In the academic year 2017/2018 TUCN has 20,130 students in 96 bachelor programmes (15,669 students), 110 master programmes (4,461 students), 14 doctoral fields (225 students) as well as continuing education, teacher training courses and postgraduate studies. The offered bachelor studies are divided into 8 semesters and the master programmes last 4 semesters. In the current academic year students are supervised by 903 teaching and research staff along with 662 members of non-teaching and auxiliary staff. Nearly everybody of the academic staff holds a PhD. 115 (71.88%) out of 160 professors being also PhD supervisors. According to the Law of National Education 2011 TUCN was categorised in the top group of 12 Romanian universities as “University of Advanced Research and Education”. Research activities at TUCN are remarkable and have been continuously growing during the last years (revenues from research activities, number of publications, national and international projects, etc.)

TUCN comprises 52 buildings, with a total area of sqm 224,368. The oldest building dates back to 1889.

The financial resources of TUCN come from the government, from tuition-fees of paying students, from research projects and contracts. The financial management of TUCN operates very well. According to the provided information, the total revenue in 2017 was 258,781,469 Lei compared with total expenses of 286,439,249 Lei, a slight minus after overheads in the previous years.

The University is governed by the Rector with 7 Prorectors and the Senate. The Rector, the seven Prorectors, the General-Director of Administration and the General-Director of Economics form the Administrative Bureau. The Administrative Council is formed by the Rector, the seven Prorectors, the twelve Deans, the General-Director of Administration, the General-Director of Economics, one student and one staff representative.

The Senate consists of 108 members (81 academics and 27 students).

3. Outline of the Visit

The institution has taken the evaluation process very seriously and carefully prepared the Self-Evaluation Report 2018 (SER 2018).

3.1 The Self-Evaluation Process

During the last years TUCN has set several steps of improvement considering the recommendations of the ARACIS evaluation 2013 and the institutional evaluation by the European University Association in 2012. The SER 2018 of 88 pages describes clearly the educational part and research activities of the institution. However, as the SER 2018 was mainly elaborated in order to prove the ARACIS requirements the focus was on the study programmes and not so much on the institution as a whole and the governing structures. As usual in Romania, the SER 2018 is not very critical with respect to internal problems. Internal threats are not really mentioned or discussed (e.g. overloaded curricula, demand for more engineering practice, low student participation in evaluation procedures, overworked teaching staff, problems hiring qualified new staff).

3.2 The Evaluation Visit

The institutional evaluation visit to the TUCN began in the evening of May 22, 2018, with the arrival of the members of the ARACIS team coming from outside at the Hanul Fullton Hotel in Cluj-Napoca.

During the evaluation visit, I participated in the meetings of the main ARACIS team, but did also arrange my own interviews and examinations.

Wednesday, May 23

The official evaluation procedure started with a solemn opening ceremony on May 23 at 9:00 am, in the meeting room of the Administrative Council in Str. Memorandumului nr. 28. Rector Prof.univ.dr. Vasile Țopa welcomed the ARACIS delegation and introduced the present representatives (Prorectors, General Director of Administration) of TUCN. The representatives of the North University Centre of Baia-Mare followed the ceremony by a video-conference.

Mission Director Prof.univ.dr. Anton Hadăr and the Mission Scientific Coordinator Prof.univ.dr. Dumitru Miron presented the ARACIS team and explained the evaluation procedure.

In the course of the first day, the ARACIS team performed the usual activities. After an internal ARACIS meeting in order to discuss the organisational details of the evaluation (part of the evaluation taking place in Baia-Mare) we visited for more than one hour installations at different buildings in the centre of Cluj-Napoca (faculty buildings, lecture rooms, laboratories for microelectronics, microchips, superconductors, etc. - financed partially by European projects). We also met several on-going classes and observed staff and students during work.

In the late morning hours, I had an informative talk with Prorector Prof.univ.dr. Daniela Popescu and dr. Sanda Pădurețu on the activities of the Senate

At 12:40 pm I had a private meeting with Rector Prof.univ.dr. Vasile Țopa.

After lunch I had a short visit to a library and afterwards I met the General-Director of Administration and the Head of the ERASMUS office. .

In the late afternoon, I attended the meetings of the ARACIS team with about 70 students, with 28 employers and finally with 25 graduates. The meeting with the employers with representatives of big international companies like Bosch and Emerson turned out to be very interesting and informative. As expected, students and graduates at TUCN were commonly positive and only some minor problems (e.g. recognition of credits from other institutions, lack of space in the student dormitories, etc.) were stated.

Thursday, May 24

The morning was covered by meetings together with representatives of the ARACIS team with the Quality Assurance committee at 10 am, with the President of the Ethics Committee at 11 am and the Director of the Counselling and Career Orientation Centre at 12 noon.

After lunch I made a short visit to the registration office of the Faculty of Civil Engineering and checked some student files.

At 15 pm I had a meeting with 9 international students at TUCN and at 16 pm with 11 students from the English and German study lines. One of the student members of ARACIS accompanied me for these meetings. The discussion with the students in these small meetings was very open and informative.

Friday, May 25

In the morning, all Team members finalised their documents. The Mission Scientific Coordinator Prof.univ.dr. Dumitru Miron summarised the impressions and results of the evaluation visit. I also gave a short report on my findings and intended recommendations. Due to a Senate meeting at TUCN the final meeting of the ARACIS team with the representatives

of TUCN was scheduled for the afternoon. But I had to leave to the airport before the final meeting.

4. Governance and Institution

Being a university with a long tradition and of high reputation it is no surprise that especially some of the long time staff members of TUCN do not feel any pressure for changes and innovation. This makes it sometimes difficult for the university leaders to respond to new challenges and changing contexts. Nevertheless, TUCN has taken important steps with respect to its further development. Research and services to society (co-operation with socio-economic environment, European projects, career centre, international activities, etc.) have been expanded and strengthened. The leaders of TUCN are highly committed to the institution. There exists a climate of friendship between all university leaders. The governing bodies have developed a culture of consensus and co-operation without being caught by conflicts. Similar to many other Romanian universities, also TUCN has a favor for collective decisions and there exists a large amount of "homemade" bureaucracy. This means an enormous waste of human resources, despite of the fact that teaching staff in Romania is anyway already overloaded. The Senate with 108 members is quite big for a modern university governing body – Vienna Technical University has a Senate of 26 members. A modern university management should be able to take fast decisions and to react quickly. For that purpose a strong rectorate and clear and fast decision procedures are essential. Complex and overlapping processes between Rector and Senate have to be avoided. Responsibilities of the Rector and the Senate have to be completely clarified (although the Law 2011 is not very clear with this aspect).

TUCN has implemented all legally required instruments for quality assurance and established an Ethic Commission. The existence of the Strategic Plan 2016-2020 and a very detailed corresponding Operational Plan 2017-2018 have to be commended. But long-term strategy at Romanian universities is limited by a lack of autonomy and legislative uncertainties. Nevertheless, the habit to extend the number of vacant positions from year to year should be stopped. Universities should look more into the future and not so much into the past. If a position is vacant for 3 or more years, the University does evidently survive without this position. As a consequence it should be cancelled and the focus should move to new positions urgently needed.

There seem to exist still open problems with the integration of the North University Centre Baia Mare into TUCN. According to my information Rector Prof.univ.dr. Vasile Țopa and Mission Director Prof.univ.dr. Anton Hadăr were trying to clarify things even during the ARACIS visit.

Recommendations:

- Further simplify the organisational structure and review the size of decision-making bodies.
- Define clear responsibilities between the Rector and the Senate giving the Rector and the Prorectors full responsibility for the operational management of the institution and the Senate the power for all strategic decisions and the definition of regulations.
- Introduce benchmarks and performance indicators drawn from comparable institutions into strategic planning.
- Try to motivate students to take more responsibility and ownership for the development of TUCN.

- The existence of the Ethic Commission has to be commended. But as I have already mentioned on other occasions, an ethic commission composed only by members from the institution will not be able to handle sensitive cases like corruption and academic misconduct of senior university members. I strongly recommend to install – if necessary informally - an inter-university commission with half members coming from TUCN and the other half from other universities.

5. Quality Culture

TUCN has set up important activities and procedures for Quality Assurance (QA) during the last years. But many university members including students have still little understanding of the purpose and benefits of QA procedures. Students are even not motivated to perform the evaluation of teaching. The feedback system on the results of QA procedures to students and teachers varies considerably among different faculties. The evaluation of courses after examinations hinders improvements and reactions during the on-going semester. The link of evaluation results – even if the participation rate is very low – to salary benefits is problematic. Summarising, there is still some space for further improvements of QA at TUCN.

Recommendations:

- In order to create a real climate of quality culture at TUCN, try to reduce bureaucratic efforts and avoid redundancies, promote the purpose and benefits of quality assurance procedures and shift from inspection and control to an improve-oriented approach providing support to staff and students.
- Use evaluation results for strategic decisions and make results and consequences public.
- Consider to organise the evaluation of courses already during the semester in order to enable first improvements and reactions during the on-going lecture.
- Consider evaluation results for your decisions only if a minimum participation rate is given.

6. Teaching and Learning

Teaching and learning is one of the strong points of TUCN. The quality of the education at TUCN was recognized in the meetings with employers, graduates and students (including international students and students following lines in foreign languages). However, some students mentioned problems with the recognition of credits from other institutions, others complained on examination procedures (cannot see their exams) and criticized the lack of space in the student dormitories. There was also a wish for more double rooms – a European standard nowadays.

Some of the Bologna ideas such as student-centred learning, team-work, self-learning parts, practical work need to be further strengthened. Some study programmes seem to be overloaded. The involvement of stakeholders into curricula discussions seems to be very informal and only based on personal contacts.

Study offer of programmes (bachelor and master) is highly fragmented und specialised (e.g. bachelor in mathematics, computational mathematics, computer science in the North University Centre Baia Mare).

Recommendations:

- Formalise the involvement of stakeholders in order to monitor and improve the quality of education.
- Further develop student-centred learning parts and other Bologna intentions within the curricula.
- Avoid large overlapping study programmes, especially in the bachelor cycle and make better use of synergies (e.g. students of mathematics and computer science could attend many common courses – I am sure there are similar possibilities for architecture and civil engineering as well as in many engineering disciplines).

7. Research and Service to Society

Research has a high priority throughout TUCN. The meeting with the employers, talks with the Rector, the documentation on research and last but not least the visit to different research labs provided evidence of the excellent research relations of TUCN with companies like Bosch, Emerson, Infineon, etc. By the merit of the very active Prorector Prof.univ.dr. Daniela Popescu and her team contacts with the socio-economic environment have been intensified significantly during the last years. Support for researchers and research projects has improved considerably. TUCN is partner of important European research projects.

Recommendations:

- Continue cooperation with enterprises and consider the foundation of a science and research park together with industry.
- Stimulate academic entrepreneurship of staff, graduates and students.

8. Internationalisation

Internationalisation is a multi-dimensional task taking into account mobility programmes, language policy, curricula, joint study and double degree programmes, collaborative research, conference attendance, etc.

TUCN is very active and successful with respect to many aspects of internationalisation. But the institution's strategy for internationalisation seems to be very general and not focused enough on the intentions of a technical university.

Students were complaining that the recognition of credits from other institutions was very restrictive. Some incoming students had problems to find adequate accommodation in Cluj-Napoca.

Recommendations:

- Define clear goals for internationalisation (strategic partnerships, language policy, mobility, research collaborations).

- Further strengthen internationalisation at home by offering courses given in English language at all Faculties.
- Benchmark with similar institutions in Romania and abroad and compare key parameters (curricula, research, number of students, staff numbers, drop-out rates, mobility numbers, etc.)
- As the experience of a semester abroad is very valuable for the personal development of an academic, be as generous as possible with respect to the recognition of credits from abroad.
- Improve advice for incoming students looking for accommodation in Cluj-Napoca.

9. Final Remarks

TUCN is a very good university with respect to education and to research. Its importance for the North of Romania and beyond is evident. But in order to master even more successfully the present and future challenges of higher education in our global world the organisational structure and decision processes at TUCN should be streamlined and bureaucracy reduced as much as possible.

These remarks and recommendations should assist TUCN to pursue its successful way into the future.

Winfried Müller

em.Univ.-Prof.Dr. Winfried Müller

