

## **ARACIS**

Romanian Quality Assurance Agency for Higher Education

External Institutional Evaluation

Technical University of Cluj-Napoca

Romania

Foreign Expert Report

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## 1. Introduction and conclusion.

Early this year (2013) I was invited to participate in the External Institutional Evaluation of the Technical University of Cluj-Napoca, Romania, and I accepted the invitation with pleasure. I have been involved in other evaluations in Romania for the National University Research Council and have furthermore performed a series of different university evaluations in Denmark, Sweden, Iceland, Lithuania, Slovak Republic, Cyprus and Turkey.

I have earlier received from ARACIS a guide on "External Evaluation of Academic Quality in Accredited Higher Education Institutions (External Institutional Evaluation) dated December 2006. This guide follows the European Standards and Guidelines for Quality Assurance, and I find the procedure well defined and illustrates that a competent agency is running this type of evaluations. This is indeed also the impression I have got from former ARACIS evaluations I have participated

in at Dimitri Cantemir University, University Carol Davila and Tibiscus University.

In late May I received the Internal Evaluation Report from the Technical University of Cluj-Napoca a document of 71 pages and with 188 appendices in the form of links to documents from the university and various external authorities. Unfortunately for this external expert the majority of the appendices were not available in English, and thus my judgements in this document is based on the Internal Evaluation Report and the conversations I have been involved in during the site visit at the Technical University of Cluj-Napoca.

The site visit to the university was well organised and we were well taken care of all the way from transportation internationally as well as nationally and between meetings, to installation in a local and very comfortable hotel. The meetings at the university went on in a very pleasant atmosphere and everything being asked for in the form of documents and meetings was delivered promptly and correct.

The meetings in and with the ARACIS team of evaluation were generally performed in the Romanian language, and for this matter I was during the site visit attended by a very competent interpreter who gave me a first hand feeling for the presentations and discussions going on around the table and in at the various meetings with the management, alumni, students, teachers and employers of the university graduates.

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The Technical University of Cluj-Napoca is a public medium sized higher education institution. It strives to offer research based education at all three levels – bachelor, master and PhD - and to develop and maintain an internationally oriented atmosphere in its teaching and research activities. My judgement in this relation is that there are still challenges to overcome. However, there exists international relations, international cooperation and Erasmus activities to build on.

Generally there is a good commandment of the English language between teachers and students, and the university also offers various engineering courses both in English, German and French as a necessary platform for bilateral student exchange programs with partner universities in Europe. The university also has focus on the internationalisation process through appointment of a Vice-Rector for Internationalisation and the placement of offices for internationalisation at the various faculties.

I find the working conditions for the academic staff in relation to their research work reasonable in relation to office space, experimental facilities, means of communication and access to relevant and recent literature also in electronic form. However, the amount of time allocated for research for the individual teacher is somewhat below the standard at universities in e.g. many universities in Western Europe.

It is also obvious that there exists a close working relationship with many companies in Romania and Europe – e.g. Siemens, Bosch, Emerson and ABB – which creates the opportunity for mutual projects, donations of equipment and job opportunities for students and graduates.

I feel that I during the  $2\frac{1}{2}$  days of visiting the Technical University of Cluj-Napoca and through my preparations done in the available documents have got a fair notion of the standard and performance of the management, the academic staff and the students at the university.

On basis of the below described experiences I find this university as being off

## High Confidence

and with potential of developing into a respected internationally oriented university. The University has a number of strengths, weaknesses, opportunities and threats which is well identified and documented in a SWOT analysis is of good quality.

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## 2. Strategic Planning

The Technical University of Cluj-Napoca has worked out a strategic plan for the period 2012 – 2016, which in the English version is a document of 36 pages. It is a well written document which includes the performed SWOT analysis.

The main policies of the strategic plan includes developing the university based on teamwork and collaboration relations between departments, ensuring a constructive dialog with other universities in Cluj-Napoca, merging and collaborating between research structures in order to form collaborations of interdisciplinary nature, ensuring the quality of the educational process, reducing bureaucracy, promoting transparency, optimizing the administrative and functional structure, using resources based on data and facts, decentralizing the decision-making structure, encouraging academic entrepreneurship and ensuring a participative management in order to promote open collaboration based on ethic and moral principles.

Nobody can disagree with these principles. However, they are so many that it may be felt like just words. In my opinion the university has to select a few principles as the main factors for the development in the period of 2012 - 16.

For me the following three would be the most important:

- 1. Interdisciplinary collaboration across the Technical University of Cluj-Napoca and other relevant universities in Cluj-Napoca, the region and abroad.
- 2. To ensure the quality of the educational process.
- 3. To enforce a participative management.

In future planning periods the university may choose to focus on other principles. However, I think there is a lot of wisdom in a Danish saying, which directly translated goes like this: "It may be difficult see the forest for all the trees!"

Concluding on the strategy plan my opinion is that is an excellent document, however, it is difficult to see which direction the university will choose confronted with all the challenges a university of today may foresee.

## 3. SWOT analysis

The SWOT analysis is as background for the strategic plan also a well written, very qualifying and detailed document. As a background document it is of value to be detailed in order to define the platform for the choices to be made in relation to working out a strategic plan. I find the strengths (S) and the weaknesses (W) covering and well described, however, opportunities (O) and threats (T) are somewhat vague in their formulations.

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I think that specifically interdisciplinary cooperation in the university, in cooperating with other universities in the city, in the region and abroad would be a clear opportunity (O) to identify, as is working with quality instead of quantity in the study programmes and enforcing participative management (cf. above under 2.)

Also the description of threats (T) is insufficient in the way that all the described threats only are external. During our site visit I have discovered some internal threats also: An overloaded curriculum, low student participation in theoretical lectures, a call from students for a more engineering work practice and a somewhat frustrated and overworked teaching staff. It is fine of course to identify the external threats, but they are difficult to tackle. The internal threats, however, lie more in the hands of the university to tackle and solve e.g. through participative management.

I have in this section tried to discuss the value of the SWOT analysis and its connection to the Strategic Plan. I suggest that the two documents at a given opportunity are re-read and checked for the interconnection between them.

## 4. Bologna Process

In the Internal Evaluation Report is the following stated under item III (University strategy in the field of quality assurance):

"The main objectives over the next years directing quality assurance refer to the compatibility with the guidelines of the European education and adjustments of the academic offer towards the requirements of the labour market, as well as strengthening the entrepreneurial dimension of the university".

Later under item VI it reads:

"Technical University works in compliance with the Constitution and laws of Romania and in accordance with the rules of the Great Charter of the Universities of Bologna (1999) and is a signatory to it (2004)".

I read and hear this as if the Technical University of Cluj-Napoca plans and executes the studies in the university according to the Bologna Process.

The Bologna system has the following six specific conditions for studies at higher education institutions:

- 1. Easy readable and understandable grading systems and diploma supplements.
- 2. A two cycle study structure consisting of a Bachelor's and a Master's level in a 3 + 2 model leading to a total of 5 years of studies to obtain the Master's level.
- 3. Common point systems (ECTS) and grading scale.
- 4. Possibilities for mobility
- 5. European cooperation in quality development.
- 6. Promoting an European dimension in higher education across Europe.

In relation to the Bologna criteria I find at the Technical University of Cluj-Napoca two major discrepancies.

First and foremost this university awards as do other technical universities in Romania a Bachelor's degree after four year of studies, and the argument presented is that this is the amount of years it takes to give the students the necessary qualification for this educational level in engineering.

However, this was not agreed to when I brought up the question in a conversation with the employers of graduate from this university, they saw no problems in a first cycle of only three years.

The teachers of course found 4 years as a necessity, but I think the university should bring up this discussion with the relevant authorities in order to normalise the situation in relationship to the majority of the technical universities in Europe. Doing this would also make a lot of international exchanges and transfer of merits from one university to another much easier than today for the Technical University of Cluj-Napoca.

In conversations with students I got the impression that the curricula in the Technical University of Cluj-Napoca has a tendency to be overloaded. In this relationship I think that the university ought to go through the entire curriculum and check if the ECTS system works in the proper way at the institution.

60 ECTS points compare to a full year's study of courses where 1 ECTS point corresponds to 28 working hours. This means that the curriculum should be build up in such a way that an average student should be able to pass through the relevant tests of the year with an engagement corresponding to approximately 1700 hours.

I think the university ought to check whether the expected standards really is the background for the present course packages?

### 5. Internationalisation

A university of today in what we call the global village needs to have an internationalisation policy and an ambition to pursue it.

Internationalization is one of 14 target directions of the university, however, I am not sure if the procedures for internationalization is well described.

I take note of the fact that the university has a Vice-Rector for Internationalisation, that there exists several international offices, that students and staff do bilateral international exchange in reasonable numbers and that a number of courses in the university is given in English, German or French.

What I have not found is an individual and visible document which is setting the standards and ambitions of the internationalization process of the Technical University of Cluj-Napoca.

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I am sure that internationalisation will progress in this university and I have noticed that the English language is a notable competence both among students and staff (*cf. below on item 6*).

## 6. Language

In small countries with a specific language of its own like *e.g.* Denmark and Romania it is of utmost importance that knowledge of and competences in foreign languages is a wide spread phenomenon. In the case of universities proficiency in the English language is very important as this language today is the *lingua franca* of science in general. If one cannot communicate, write, speak and publish in English one has a major problem in advancing in one's subject and to be competitive on the international scene.

I do not know which policy the Romanian government and parliament has on foreign languages and intercultural competences for the Romanian population – and especially for children and youth under education. However I noticed that generally both staff and students were quit proficient in the English language, which means that the university is ready for the challenges connected with globalisation and international exchanges within *e.g.* the European Union under various educational programs such as Erasmus.

I judge the time as being ripe for the university in its ambitions of becoming international recognised in general and a trusted partner in educational and research programmes financed by *e.g.* research councils, the European Union and international companies, as it is already the case for some of the research groups I had the possibility of visiting.

## 7. Premises and facilities

The Technical University of Cluj-Napoca is a medium sized institution with a number of satellites outside the town, and especially the North University Centre, Baia Mare, was attracting some attention during the meetings and discussions.

I had during my stay in Cluj-Napoca the chance of visiting the premises of the Faculty of Mechanical Engineering and the Faculty of Electronics Telecommunications and Information Technology.

I found the laboratories and teaching facilities of the two faculties as being of good quality and well equipped with instruments of contemporary appearance originating for some parts in cooperation projects with international companies (Emerson, Bosch, ABB, Siemens).

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The conversation with the management and staff of the two faculties went on smoothly in English and I was further introduced to visiting researchers from abroad.

The lecturing facilities look quite modern and well kept, so all in all I had a very good impression of the working conditions and possibilities of engaging in projects at the cutting edge of research within the areas I was introduced to.

I will also like to mention in relationship to the management of the faculty of Mechanical Engineering that this is really being a showcase of role modelling with 3 very competent ladies as the top management of the faculty.

A note about the North University Centre, Baia Mare.

I did not visit this satellite of the Technical university of Cluj-Napoca. I only had some impressions from the discussions including staff from Baia Mare on a video link in the Senate Hall in which the common meetings were held.

During the discussions I felt some tension in the relationship especially coming from Baia Mare and the people there representing a faculty of humanities.

Much cutting edge research of today develops through cooperation between traditional areas of well defined subjects also between *e.g.* engineering, humanities and art. However, the platform for interdisciplinary coopetition (co-operation and competition) has to be nursed and the people have to come together person to person and not only on video link. To accomplish a trustful integration of Baia Mare into the rest of the Technical University of Cluj-Napoca is obviously not going to be easy and will take some effort, resources and involvement from the top management of the university in orders for it to be fruitful and less with tension than today.

## 8. Benchmarking.

In the Internal Evaluation Report, which we received as preparation for our site visit and evaluation of the Technical University of Cluj-Napoca, a number of tables and figures are illustrating the development of the university over the last 7 to 8 years. It is certainly necessary in order to evaluate the function and quality of a university to compile a number of key parameter. These are: Student intake, number of graduates, drop-out rates, employability of graduates, number of teaching staff, number of academic staff doing research, number of administrative and technical staff etc. Further one needs numbers of publications and type of publications, books, patents, national and international contracts, number of international exchanges for both students and staff, invitations to lecturing at national and international conferences, number of visiting scholars etc.

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Other parameters may also be valid. However, my point is that any institution should build up a consequent documentation system as the Technical University of Cluj-Napoca does it. Such a system is valuable in the management of the individual university, however, also important in accounting to agencies and ministries.

Finally and most importantly key parameters may be used in benchmarking with other higher education institutions in Romania and more importantly abroad to document a certain ranking and to learn about both strong and weak sides of the individual institutions.

I noticed in the evaluation material, which we have received in connection with this site visit, that the Technical University of Cluj-Napoca has international cooperation with universities in Greece, Hungary, Austria, Denmark, UK, Finland, Poland, the Netherlands, Bulgaria, Ireland, Estonia, Croatia, Cyprus, Lithuania, Czech Republic and Slovakia.

I suggest that the university chooses 3-5 partner institutions from the above mentioned countries with whom benchmarking is performed as an useful exercise.

# 9. Course Evaluations and the general attitude of the students towards the Technical University of Cluj-Napoca.

During our visit in the Technical university of Cluj-Napoca I had the opportunity to talk with a number of students. It was a pleasure to listen to their reports from classes and to feel their enthusiasm for the institution.

With respect to course evaluations the students I spoke with knew about the existence of these and the connected process. However, the indication was from both students and teachers that participation in the evaluations was relatively low. This is a shame as course evaluations are a useful instrument in creating proposals in relation to better learning outcomes and for teachers to improve their performances.

I understood that the course evaluations were performed in the classes and were thus dependent on the number of students being present, and since the evaluations were performed at the end of the semester, where only a fraction of the students were present in the class, the score in relation to number of participants was relatively low.

With respect to course evaluations these can be done in many ways and with many purposes and the literature about this subject is quite extended. My personal opinion about course evaluations and whether students think they are worth the effort is related to whether the students experience an effect of the performed evaluations or not. Therefore my personal priority for course evaluations are to execute do them at midterm. I that way the students may actually be able to discuss the results in the class and see the potential changes in the course content and livery while they themselves are still attending the course.

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In relation to students we learned that there were several active student committees and a student union. This is according to my opinion a very good sign for the university, since the customers of the institution in this way may have a saying about the university life in general and involvement in the decision making at the management level of the university.

#### 10. Final Remarks.

It was interesting to participate in the External Institutional Evaluation of the Technical University of Cluj-Napoca and I learned through this engagement more than I knew before coming to Cluj-Napoca about the situation for universities in Romania, which for the time being is not so easy since teaching occupies a relation big portion of the working time for the academic staff.

As a matter of fact I saw somewhere in the documents that the available time for research for the academic staff was lying around 1/5 of the total working time which is low compared to a number of the partner universities in Europe where the allocated time for research may be as high as up to 1/2 of total working hours.

In this perspective I will allow myself to be impressed with some of the research activities and results with which I was presented with during my site visit in the Technical University of Cluj-Napoca.

For further evaluations along the line defined by ARACIS I will suggest as before to focus on a procedure of performing a major part of the discussions in English if foreign experts are going to be an effective part of the evaluations. Doing this would help the foreign expert a lot and also show clearly which universities are competent on an European level and who are not. Even though I was serviced well by a professional interpreter I am sure that I missed a lot of important details in the discussions around the table and thus my in-depth knowledge of what is really going on in the Technical University of Cluj-Napoca may be too weak for making such recommendations as I have done it above.

Signed 17th June 2013

Hans Heter Jensen