

# **An audit model in Croatia - A study based on a pilot project of three HEIs**

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## **Abstract**

By signing the Bologna Declaration in 2001 Croatia has started a process of serious transformation of its higher education system.

Today, quality, quality assessment and enhancement of a quality culture are a major focus for the Croatian academic society, government and national economy.

In the strategic document Education Sector Development Plan 2005-2010<sup>1</sup> set out by the Ministry of Science, Education and Sport (MSES), it was stated that:

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- Quality assurance units in higher education system of the Republic of Croatia should be established by 2006.
- A binary system should be introduced by the beginning of the academic year 2010/2011. "

The Agency for Science, Education and Sport (ASHE) developed a model of external audit of Quality Assurance Units in 2006/07 and tested it through a pilot project at the beginning of 2008. The pilot project was a part of the CARDS 2003 project " Furtherance of the Agency for Science and Higher Education in its Quality Assurance Role and Development of a Supporting Information System" . The present study is based on the analysis of an audit model and outcomes of this Pilot project.

## **The context of higher education in Croatia**

Croatia adopted a strategic goal to be a part of European Higher Education Area (EHEA); to transform into a knowledge-based society and develop a knowledge-based economy. Looking at the education development trends in Europe and throughout the world, Croatia has recognized the need to transform its educational system to meet the new requirements. The aim is to develop a more flexible and effective higher educational system that is compatible with other higher educational systems in EHEA.

The main stakeholders in higher education in Croatia are universities, polytechnics, Rectors' Conference, the Ministry of Science, Education and Sports, the National Council for Higher Education, the National Council for Science, the Agency for Science and Higher Education and Students' Union.

The National Council for Higher Education, the National Council for Science and the Agency for Science and Higher Education systematically monitor and control the quality of the higher education system and teaching, as well as the scientific research work at higher education institutions.

In 2003, a new Act on the Scientific Activity and Higher Education<sup>2</sup> (Official Gazette 123/03 and 105/04) was adopted.

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The programs were harmonized with the Bologna Declaration and a review procedure for the purpose of accreditation was carried out for undergraduate and graduate academic programs proposed by higher education institutions in the Republic of Croatia during 2005. There have been some strong debates on Bologna process amongst stakeholders in higher education, especially on the outcomes of the learning process.

Organization of quality assurance units at Croatian universities has started in 2006/07.

The quality assurance system in Croatia has envisaged involvement of students at all levels in development and implementation of the QA system process, in accordance with the Berlin Communiqué. Students are expected to participate in the evaluation of the teaching staff, programs or institutions, including internal assessment and external review. The policy statement of each HEI shall define students' involvement in quality assurance.

### **A model of external audit of quality assurance system in Croatia**

The E4 Group (ENQA, EUA, EURASHE and ESIB/ESU) produced “Standards and Guidelines for Quality Assurance in the European Higher Education Area”<sup>3</sup> in 2005. These standards and guidelines were adopted in Croatia by the National Council for Higher Education in 2006. During the CARDS 2003 project “Furtherance of the Agency for Science and Higher Education in its Quality Assurance Role and Development of a Supporting Information System“ in 2006/08, the Agency for Science and Higher Education worked on educating its staff and developing a quality culture at the national level. ASHE had helped HEIs establish quality assurance units, as well as provide support in preparing the documents of QAS.

Its mission is to synchronize the Quality Assurance system of HEIs and help Croatian HE integrate into EHEA. The Agency's aim is to spread examples of good practice and to promote a quality culture.

There are three types of external quality control in Croatia: accreditation/re-accreditation of study programs, institutional accreditation and evaluation of HEIs. The Act on the Scientific Activity and Higher Education was adopted in 2003 and amended in 2004, before ESG was created and adopted in Croatia in 2006. This Act had no mention of audit. However, when ASHE was founded by the Government of the Republic of Croatia in 2004, one of its tasks was to organize processes of external evaluation of QA units.

The Agency had developed an audit model and presented it in the Audit Manual.

During CARDS 2003 project ASHE tested it through a pilot project, which involved three Faculties from three different universities.

The audit consists of four phases:

1. Planning
2. Execution of audit that includes visit to HEIs
3. Reporting
4. Follow-up phase.

The audit of the HEI's quality assurance system is based on a peer review that is to identify a developmental level of the QA system within the HEI concerned. One of the most important tasks for the Agency was to train experts who will be reliable and well educated in the field of quality assurance. The Agency organized three seminars for the first generation of quality assurance experts. An expert from the UK participated as a presenter on one of these

seminars. He presented the UK model of institutional audit and showed examples of good practice to his Croatian colleagues.

Upon completion of the auditor training, ASHE formed a base of experts that comprised representatives from academic staff, students and the economic sector.

An audit is an evidence-based process carried out by the audit team consisting of six members: 3 members from the academic staff, 1 from a scientific institute or the economic sector, 1 student representative and 1 member from the Agency's QA department.

Such audit is based on findings of internal audit of QA units as well as on findings of an external audit team. Everyone should be aware that the main responsibility for the functioning, developing and improving the QA system is upon the universities and their units.

The basic elements of the Quality Assurance System are:

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|--|-------|
| 1. Quality documents (strategy, SWOT/ mapping, handbook)             |       |
| • Quality goals (What?) Management of HEIs!                          | PLAN  |
| • Mechanisms, procedures (How?) All major activities!                |       |
| • Role and responsibilities (Who?) Involvement of students!          |       |
| 2. Implementation  | DO    |
| 3. Feedback and monitoring   | CHECK |
| • Internal (e.g. surveys, self evaluation, periodic internal audits) |       |
| • External   |       |
| 4. Acting on findings, enhancement measures                          | ACT.  |

Independent evaluation of the quality assurance system, in accordance with ESG, Audit Manual and related documents, include the following:

- Evaluation of the HEI's QA system procedures and implementation of ESG standards
- Evaluation of internal audit's report (objective, exact, precise, concise, etc.)
- Evaluation of the implementation of good practice
- Evaluation of the efficiency of the internal audit result application
- Determination of the level of achievement of the internal audit's goals
- Peer review and site visit
- Interview with all stakeholders
- Collecting evidence
- Report preparation
- Appeal procedure
- Follow-up process
- Transparent public information about audit findings.

Following the decision of the Agency's Management Board on launching pilot audits at three HEIs, ASHE requested the assistance of the CARDS 2003 project. The CARDS 2003 Project Steering Committee supported the implementation of the pilot audits in September 2007. The Agency made agreements with three HE institutions (University of Osijek, Faculty of Civil Engineering; University of Zagreb, Faculty of Organization and Informatics Varaždin; and University of Rijeka, Technical Faculty) that wanted to participate in the Pilot project. All of these Faculties participated in a 2005 project accepted by The National Foundation for

Science, High Education and Technological Development (development of an organizational system and procedures for quality improvement at the University of Rijeka; Reference Center for Quality Assurance in Higher Education Institution at the Faculty of Organization and Informatics in Varaždin; establishment of quality assurance system at the University of Osijek).

Each audit was a separate project, with a coordinator from the Agency.

The audit team and HEIs signed an audit agreement indicating their obligations:

- type of audit
- audit schedule
- composition of the audit team - international and domestic experts
- time and duration of the audit visit
- financing of the audit
- basic audit materials (Agency documents, HEIs' documents, Audit teams' documents)
- appeal procedure
- conditions of final report publishing
- the commitment of the auditee to a possible re-audit.

The basic audit materials were sent to the HEIs and to auditors. ASHE collected the HEIs audit materials and sent it to the members of the audit team. They reviewed all materials and audit procedure. The team met to prepare the audit visit, chose the president of the team and discussed and planed the visit.

The audit team and its coordinator visited the HEIs. The visit went on for two days. During this period, the audit team interviewed all stakeholders, perambulated the HEI, collected evidence and made minutes. The first draft report was prepared and HEI's management was informed about the team findings.

The audit team drew up the draft report which was, upon its approval by the president of the audit team, sent to the management of the audited Institution.

Each report normally includes the following elements:

- Summary of the environment within the activity subject to the audit
- Objectives of the audit
- Summary of the audit methodologies used to collect and analyze data as an indication of data sources
- Explanation of criteria, such as benchmarks, used to interpret the findings
- Conclusions relating to the audit objectives
- Recommendations.

Management of the audited institution was given the opportunity to comment on the report within 15 days and have its comments included.

The final report was sent to the HEIs that participated in the project and published on the Agency's web site.

Upon receipt of the final report, the HEIs developed a detailed plan of corrective actions (to be taken in follow up phase by the responsible persons), as well as a detailed plan of implementation of these actions.

Minutes should be kept to record each completed action and its efficiency. The authorized representative of the audit team, who works closely with the HEI during the follow-up process, should receive a report (on a weekly, monthly or quarterly basis).

The audit team shall make a report on the follow up phase and all the relevant events, send it to all stakeholders, and publish it.

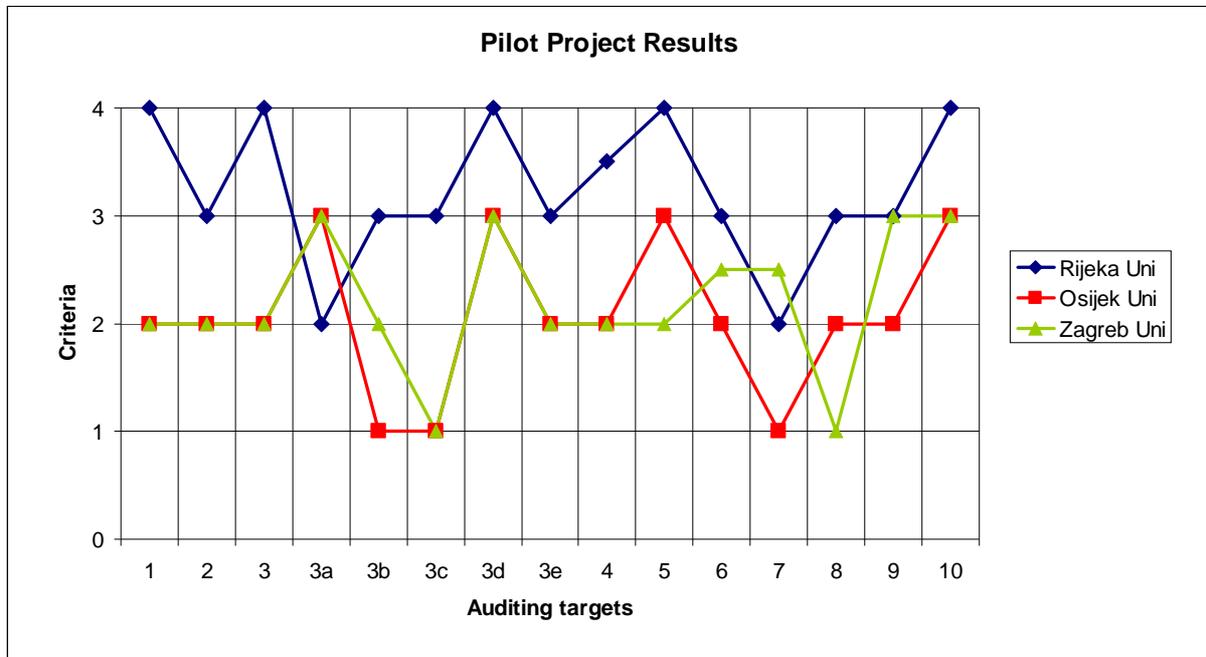


Figure 1: Audit Pilot Project Results

*Notes: During the audit pilot project we used FINHEEC criteria and Auditing Targets<sup>4</sup> since we did not dispose of our own at the time. One of the outcomes of the project was that we made national criteria at the end of the project.*

- Criteria:*
- 1 - Absent
  - 2 - Emerging
  - 3 - Developing
  - 4 - Advanced

- Auditing Targets:*
1. Objectives, overall structure and internal coherence of the quality assurance system
  2. Documentation, including the formulation of the quality policy and the definition of the procedures, roles and responsibilities
  3. Comprehensiveness of QA
    - 3 a) Degree education
    - 3 b) Research / R&D
    - 3 c) Interaction with and impact on society; and contribution to regional development
    - 3 d) Support and other services (e.g. library and information services, career and recruitment services, and international services)
    - 3 e) Staff development
  4. Participation of staff, students, external stakeholders in QA
  5. Interface between the QA system and management/steering
  6. Relevance of, and access to, quality assurance information
  7. Relevance of, and access to, quality assurance information for external stakeholders
  8. Efficiency of QA procedures and structures and their effect on the development of activities
  9. Use of information produced by the QA system as a tool for quality management and enhancement in education and other activities
  10. Monitoring, evaluation and continuous development of the QA system

## Conclusion

The audits were successfully carried out and provided the Agency with valuable feedback from participating institutions and auditors.

All three projects are now in the follow up phase of the audit. All reports are published on the ASHE website. The general conclusion is that all QA systems are in the starting phase with some elements of the developed phase (the main reason being that neither of these QA units has made an internal audit, which is a basis for an external audit).

ASHE organized a final seminar for the first generation of its auditors and discussed the model of audit, results and findings of the audit, experiences of the auditors that participated in the Pilot project and possible improvements of audit materials (Manual for Auditors). During the project, we gathered information on the reality of the audit model. All the participants in the project emphasized that the audit model is functional, and found this a valuable experience in their professional development.

All three institutions that participated in the pilot project emphasized how important that experience was for the development of the institutional quality culture. They now look at themselves through a magnifying glass of an audit team. Following the recommendations of the audit team, they are making various improvements in their follow up phase, especially regarding topics such as:

- Strategy development
- Positioning of their institutions at national and international levels
- Awareness of differences between ISO and ESG
- Mobility of teaching staff and students
- Improvement of the monitoring process for study programs
- Participation of students and external stakeholders in the QA system
- Capacity building of teaching staff
- Transparency of the QA system.

All HEIs are aware of the European competition and their obligation to society, especially to their students. They realize that the internal quality culture improves their capabilities in addressing the challenges they meet. During the pilot project, it became clear that certain changes are needed in the Act on the Scientific Activity and Higher Education.

Based on the findings and recommendations provided by the consultants to the CARDS 2003 project, the general national QA framework should be reconsidered and agreed upon by all entities involved in QA of HE in Croatia. The idea is to set up a co-operative model of the national QA scheme that is in full compliance with ESG. The work on changing and amending the Act on the Scientific Activity and Higher Education is in progress.

## References:

1. Ministry of Science, Education and Sports, 2005, Education Sector Development Plan 2005-2010. Zagreb.
2. Official Gazette 123/03 and 105/04, 2003/04, the Act on the Scientific Activity and Higher Education. Zagreb.
3. European Association for Quality Assurance in Higher Education, 2<sup>nd</sup> edition, 2007, Standards and Guidelines for Quality Assurance in the European Higher Education Area. Helsinki.
4. The Finnish Higher Education Evaluation Council, 2006, Audit Manual for 2005–2007. Tampere.

*Questions for discussion:*

1. Comparison of the audit model in Croatia with other European audit models
2. Partnership and cooperation between QA units at different Universities
3. Cooperation between QA units and QA Agencies?