



Introduction

agency for science and higher education

The Agency for Science and Higher Education is an independent government institution of the Republic of Croatia. Its goal is to preserve the quality of higher education qualifications, and to act as an advocate for continual enhancements in the areas of higher education and science.

Together with the academic community and state institutions, the Agency is committed to promoting quality culture in higher education and science based on standards of transparency, dialogue, honesty, and alliance, in accordance with best European practices.

In light of Croatia's size and structural links between its higher education and science systems, it has become necessary to jointly evaluate the two systems. Transformation towards the Bologna two-cycle study system, which began in 2005 with the accreditation and adaptation of over 800 study programmes (undergraduate and graduate studies), has recently been the main focus of the Agency's work.

The adaptation of the higher education system to European and international standards is required in order to transform Croatian society into one which is dynamic and knowledge-based. This modification requires a high degree of cooperation among all stakeholders in higher education. The changes are primarily of interest to the academic community, especially the new vision and the establishment of an internal quality culture. The changes should be well-guided and show a drive towards constant system improvement.

We are consistent in our intentions to assume the role as the leading institution to be working on creating awareness



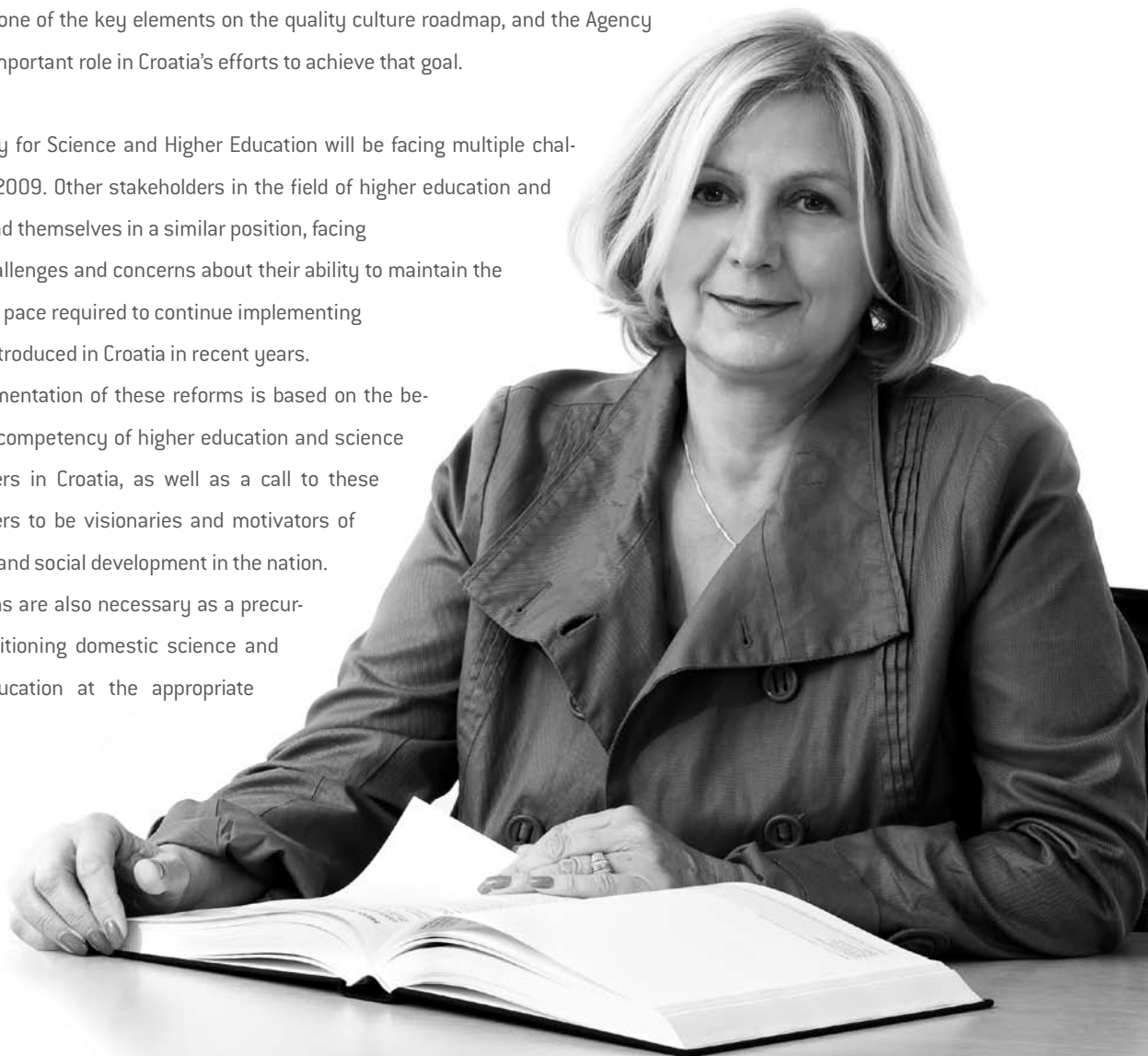
within the academic community about the culture of quality of higher education in Croatia. Recognising quality as the basis of all processes in higher education, and working on its improvement, may only be achieved through informed efforts of higher education institutions assuming their place in the increasingly competitive environments of European and international higher education.

As an EU candidate country, Croatia wishes to contribute to the joint European goal of establishing the most competitive educational system. The establishment of this system will not only strengthen the Croatian economy but will also contribute to strengthening the world's economy. The establishment of a knowledge society is one of the key elements on the quality culture roadmap, and the Agency plays an important role in Croatia's efforts to achieve that goal.

The Agency for Science and Higher Education will be facing multiple challenges in 2009. Other stakeholders in the field of higher education and science find themselves in a similar position, facing similar challenges and concerns about their ability to maintain the necessary pace required to continue implementing reforms introduced in Croatia in recent years.

The implementation of these reforms is based on the belief in the competency of higher education and science stakeholders in Croatia, as well as a call to these stakeholders to be visionaries and motivators of economic and social development in the nation.

The reforms are also necessary as a precursor to positioning domestic science and higher education at the appropriate



level in the overall fields of science and higher education in Europe (namely the European Research Area and the European Higher Education Area). Jeopardizing this vision has the potential to harm Croatia as a whole.

In anticipation of a year where there will be zero tolerance for day-to-day reckless spending, and where every item of the state budget will be closely scrutinized, it will be important for each individual to assess their sacrifice threshold. The mission of the Agency is to *nurture* the quality of systems and processes in higher education and scientific institutions. It is our belief that a higher level of effectiveness can be achieved with a focus on quality, which in itself is a form of rationalisation. Conversely, implementing efficiency at the expense of quality would be counterproductive. It should be noted that quality standards can only be measured and assessed within the context of the development of human resources - of skills and knowledge that can keep pace with current technological and cultural challenges, as well as universal needs.

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That the Agency will face multiple challenges in 2009 is a statement made in view of the recently enacted *Croatian Quality Assurance in Science and Higher Education Act*.

The enactment of this act brings with it a shift in the role that the Agency plays in development of advanced quality management models at various levels, specifically:

- At the higher education and scientific institution level, where the Agency will have an increased influence, but also a greater responsibility to formulate and track developmental needs;
- At the labour market level;
- The level at which scientifically-based development projects and supporters of their implementation meet, through stakeholder partnership and policy alliances.



Once the role shift of the Agency is achieved, the internal operational model will remove duplication and will facilitate a common focus on the aforementioned levels. The challenge is for all employees of the Agency to accept the joint mission, and the Agency's general acts should be modified accordingly.

It is foreseen that the Act will also deliver various regulative bylaws that will establish new procedures, measures and standards. The enactment of the *Croatian Quality Assurance in Science and Higher Education Act* has brought with it a need to modify the Agency's initial transformation activities which were based on previous standards and procedures. The coming year will signify a transitional period for the Agency, one which will be closely monitored and regulated by transitional provisions of the *Quality Assurance in Science and Higher Education Act* and the general acts of the Agency.

The Agency is looking forward to taking on its new role and all responsibilities associated with it.

Professor Jasmina Havranek, PhD

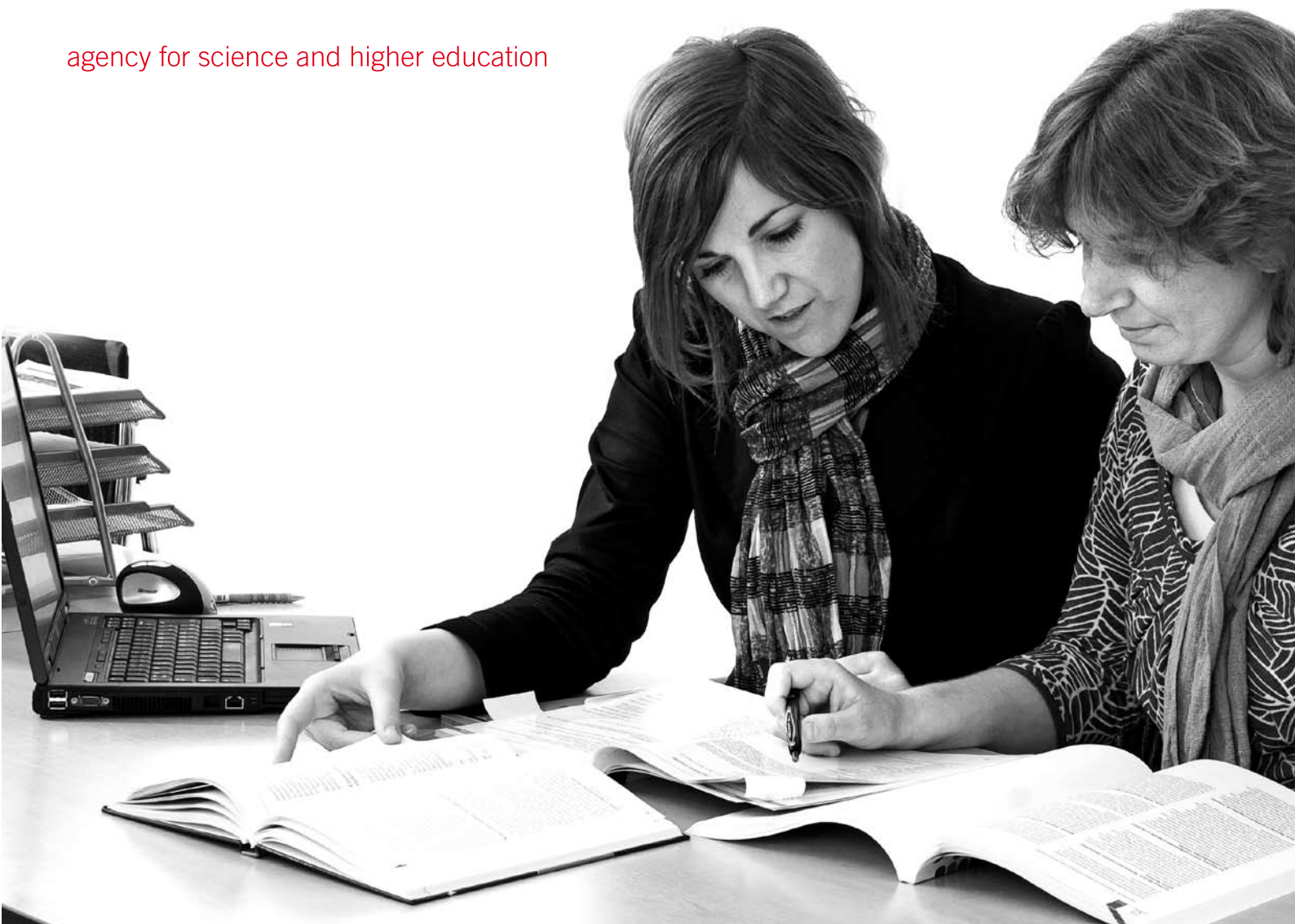
Director

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ASHE in 2008 activities overview

agency for science and higher education



EXTERNAL QUALITY ASSURANCE IN SCIENCE AND HIGHER EDUCATION

In Croatia, the areas of higher education and science are closely related. It should be noted that the responsibility for the quality of higher education and science lies with higher education institutions (HEIs) and scientific institutions.

Alternately, external quality assurance of higher education and science is the concern of the National Council for Science, the National Council for Higher Education, and the Agency for Science and Higher Education (ASHE). Taking responsibility for quality, for the present level as well as for its constant improvement, should be of interest to all stakeholders in higher education. Each country develops its own model of evaluating the quality of higher education, and in the Republic of Croatia the evaluation comprises of the following processes:

- Accreditation of study programmes;
- Accreditation of HEIs;
- Evaluation of HEIs;
- Evaluation of scientific organisations;
- Audit of quality assurance systems.

Croatia's signing of the Bologna declaration in 2001 marked the beginning of a serious transformation of the national higher education system.

The document *European Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG) was adopted by the National Council for Higher Education in 2006.

The Croatian Ministry of Science, Education and Sports set out a strategic document *Education Sector Development Plan 2005-2010*, which stated that:

- The quality assurance system will be introduced to higher education in the Republic of Croatia by 2006;
- An external evaluation of the quality of higher education study programmes and institutions will be conducted by the year 2010, while simultaneously developing quality assurance units at higher education institutions.



HIGHER EDUCATION

ASHE supports the development and enhancement of higher education quality assurance procedures in Croatia. In order to fulfil its mission, ASHE works in conjunction with the National Council for Higher Education, the National Council for Science, the Board for Financing Scientific Activity and Higher Education, relevant ministries and other public bodies, as well as higher education institutions. The partnership is achieved through both direct communication and indirect cooperation with the Rector's Conference and the Croatian Council of Universities and University Colleges of Applied Sciences. An active cooperation with similar institutions and organisations from the EU countries, in order to implement guidelines of the Bologna Declaration and establish the European Higher Education Area, is strongly encouraged.

In 2008, the Department of Higher Education within ASHE organised nine sessions of the National Council for Higher Education and, in conjunction with the ASHE Department of Science, organised nine sessions of the Board for Financing Scientific Activity and Higher Education.

The sessions were prefaced by working meetings which were attended by lead representatives

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from all aforementioned bodies and were used to finalise agendas. Other responsibilities carried out by ASHE in relation to these sessions included the calling of the session, preparation of necessary materials, documentation, tables and presentations, as well as the writing of minutes, recommendations, decisions and other documents adopted at these sessions.

Since July 2008, when the Section for the Development of Professional Studies of the Croatian Council of Universities and University Colleges of Applied Sciences became part of ASHE, four sessions of the Croatian Council of Universities and University Colleges of Applied Sciences and fifteen sessions of scientific field committees have been held.

In 2007, the ASHE's Department of Higher Education prepared all text, tables and appendices for the *2007 Annual Report of the National Council for Higher Education*. The report was adopted at the June 2008 session of the National Council for Higher Education, after which it was forwarded for processing through the Parliament's approval procedure. The director of the Agency, the president of the National Council for Higher Education, and representatives of the

Department of Higher Education attended a cabinet meeting, a Parliamentary Committee session, and a Parliament plenary session during which the Report was discussed and adopted.

During the drafting of the *Projection of Higher Education Institutions Network in the Republic of Croatia paper*, the Department of Higher Education in coordination with the Department of Analytics and Statistics, helped in gathering necessary information and data and offered support to the Board for Financing Scientific Activity and Higher Education and the National Council for Higher Education in its final version. The Department of Higher Education also assisted in writing the final version of the *Networks* document. The final document was sent to the Rector's Conference and the Croatian Council of Universities and University Colleges of Applied Sciences for consideration after which it was edited, prepared for publication and sent through a further approval process. During this further approval process it was decided that the *Networks* project would be modified.

Two projects were completed in 2008: *Subsidies for Student Meals and Accommodation and Financing of Higher Education Institutions in Croatia*, both initiated by the Board for Financing Scientific Activity and Higher Education, and contracted and coordinated by ASHE. The results of these projects were presented to members of the Board for Financing Scientific Activity and Higher Education, members of the National Council for Higher Education, and representatives of the Ministry of Science, Education and Sports.

ACCREDITATION OF STUDY PROGRAMMES

ASHE takes part in the accreditation process of all newly proposed study programmes for existing, as well as new HEIs. Ninety-nine new university postgraduate specialist study programmes were evaluated, out of which 54 new study programmes were accredited, four were denied accreditation, and 41 are still being evaluated. Furthermore, 54 new postgraduate doctoral study programmes were evaluated, out of which 37 were accredited, and 17 are still being evaluated. One hundred and eighteen new undergraduate and graduate programmes and programmes of professional and specialist graduate professional studies were evaluated: 57 were accredited, 29 were denied accreditation, and 32 are undergoing evaluation.



The main steps in the accreditation process include checking delivered documents, aiding HEIs in entering necessary data into the MOZVAG system (*Support Model for Evaluation of Study Programmes*), helping the Council for Higher Education members to appoint adequate reviewers, delivering necessary documentation to reviewers, aiding reviewers and reporters for specific study programmes with their tasks. Additional tasks include aiding reporters in writing reports, preparing necessary reviews and reports, formulating final recommendations, and gathering necessary data for reviewers' reimbursements, checking delivered documentation about teachers, and preparing an analysis report assessing whether minimum criteria for the implementation of a new study programme are met.

Special care was taken to include foreign reviewers in the evaluation of new study programmes. In accordance with reviewers' suggestions, a significant number of proposed programmes were sent back to HEIs for modification. All programme descriptions, reviews, reports, as well as final recommendations of the National Council for Higher Education, were made available to authorised users via MOZVAG.

EXTERNAL EVALUATION OF HIGHER EDUCATION INSTITUTIONS

The establishment of new HEIs constituted a considerable part of ASHE's activities in 2008. The evaluation process was started for 21 new higher education institutions (proposing 34 new study programmes in total). Nineteen new higher education institutions were evaluated, of which eight were accredited, while 11 were denied accreditation. Two new higher education institutions are still being evaluated. Apart from reviewing proposed study programmes and checking whether minimum staff criteria are met, an important part of the evaluation process includes a visit of an expert commission to an institution to check that minimum space and equipment requirements are also met.

During the past year the ASHE Board of Financing Scientific Activity and



Higher Education was a vital member of the review process, responsible for assessing the financial soundness of all proposals associated with establishing new HEIs and their study programmes. ASHE's Department of Higher Education assisted the Board in their activities.

From mid-2008 to March 2009, ASHE, in accordance with the decision of the National Council for Higher Education, evaluated 13 higher education institutions, namely:

- Faculty of Chemical Engineering and Technology, University of Zagreb;
- Faculty of Chemistry and Technology, University of Split;
- Faculty of Textile Technology, University of Zagreb;
- School of Dental Medicine, University of Zagreb;
- School of Medicine, University of Zagreb;
- School of Medicine, University of Split;
- School of Medicine, University of Osijek;
- School of Medicine, University of Rijeka;
- Faculty of Law, University of Zagreb;
- Faculty of Law, University of Split;
- Faculty of Law, University of Osijek;
- Faculty of Veterinary Medicine, University of Zagreb, and
- Faculty of Law, University of Rijeka.

The external evaluation procedure of aforementioned HEIs included the following activities:

- Providing HEIs with instructions on how to complete the self-evaluation form and its associated tables;
- Organising meetings with the deans of these institutions;
- Collecting and processing proposals for appointments of members to the expert commissions;



- Collecting, gathering and verifying received self-evaluation forms;
- Contacting nominated members of the expert commissions regarding their roles and responsibilities;
- Contacting HEIs and expert commissions' members to advise of three-day site visits to institutions;
- Finalising all technical details associated with the visits of commissions' members to the institutions;
- Participating in the visits in a coordinating role;
- Aiding the expert commissions chairpersons in completing the final reports for evaluated institutions;
- Collecting the final (evaluation) reports for all institutions and preparing them for the National Council for Higher Education sessions.



SCIENCE

ASHE aids Croatian scientific institutions with the improvements they need to make in order to become a recognised body in the area of science on a national, regional and international level. ASHE unifies and coordinates the activities of all institutions that are involved in creating the Republic of Croatia's research policy (the National Council for Science, scientific area councils, scientific field committees, working groups and expert commissions established

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by the National Council for Science, etc.). As a result of ASHE's involvement, information flow among these institutions is faster and more accurate, enabling the institutions to be better and more efficient in their work.

In 2008, ASHE provided administrative and expert support to the work of:

- Nine sessions of the National Council for Science;
- A joint session of the National Council for Science and the National Council for Higher Education;
- Sixteen sessions of scientific area councils;
- Eighty-three sessions of scientific field committees;
- Ten sessions of the Board for Financing Scientific Activity and Higher Education;
- Approximately 10 sessions of expert commissions nominated by the National Council for Science.

According to the National Council for Science's annual plan of activities for 2008, ASHE carried out the evaluation of quality and efficiency of scientific and professional activities of 13 institutes listed in the Ministry of Science, Education and *Sports' Register of Scientific Organisations*.

Additionally, ASHE supported the work of the following expert commissions of the National Council for Science:

- The Expert Commission for Enhancing the Junior Scientists' System;
- The Expert Commission for Financing Capital Investments in Scientific Equipment;
- The Expert Commission for Development of Proposals for Cooperation between the National Council for Science



and the National Foundation for Science, Higher Education and Technological Development of the Republic of Croatia (established in 2007);

- The Expert Commission for Development of the *Statute on Scientific and Artistic Areas, Fields and Branches* (established in 2007);
- The Expert Commission for Developing Proposals Regarding the Role of the Nanotechnology Initiative for the Economic Development of the Republic of Croatia;
- The Expert Commission Responsible for Compiling the 2007 Report of the National Council for Science Activities.

In June 2008, ASHE, in cooperation with the National Council for Science and the National Foundation for Science, Higher Education and Technological Development of the Republic of Croatia, organized a workshop on a new model of funding junior scientists and scientific projects.

The new *Statute on Scientific and Artistic Areas, Fields and Branches* (Official Gazette No. 78/08) was passed in June 2008.

Scientific area councils organised 16 sessions in total, specifically:

- The Scientific Area Council for Natural Sciences (5 sessions);
- The Scientific Area Council for Technical Sciences (2 sessions);
- The Scientific Area Council for Biomedicine and Public Health (3 sessions);
- The Scientific Area Council for Biotechnical Sciences (2 sessions);
- The Scientific Area Council for Social Sciences (2 sessions);
- The Scientific Area Council for Humanities (2 sessions).

The following topics were discussed at these sessions: the *Statute on Scientific and Art Areas, Disciplines and Branches*; junior scientists; how to involve scientists and researchers from the economic sector into research institutions and HEIs; restructuring public research institutes and establishing national scientific institutes; financing research equipment; and establishing centres of excellence.

The Scientific Area Council for Natural Sciences also discussed evaluation results of projects in their second phase of tender response, an action plan for encouraging investment in science and research, and amendments to the *Scientific Activity and Higher Education Act*.



Scientific field committees held 83 sessions in total, in which 1,228 agenda items were covered.

Eight hundred sixty-six decisions regarding appointments into scientific positions were delivered, out of which 38 were negative and in 324 items the additional material was required.

The number of decisions regarding appointments into scientific positions, by scientific fields committees, namely:

- The Committee for the Fields of Basic Medical Sciences, Clinical Medical Sciences, Public Health and Health Protection, and Dental Sciences and Pharmacy (239);
- The Committee for the Fields of Visual Arts, Music arts, Theatre Arts, Film and Electronic Arts (176);
- The Committee for the Fields of Agricultural Sciences, Forestry, Wood Technology, Biotechnology and Food Technology (86);
- The Committee for the Field of Economy (70);
- The Committee for the Field of Philology (62).

EXTERNAL EVALUATION OF SCIENTIFIC INSTITUTIONS

As outlined in the National Council for Science's annual plan for 2008, the evaluation of the quality and effectiveness of scientific and professional activities of 13 institutes from the MSES's *Register of Scientific Organisations* was carried out, as follows:

Alessandro Volta Aplikativna Keramika, Zagreb; DEFIMI Ltd., Zagreb; Elektroprojekt, projektiranje, konzalting i inženjering plc, Zagreb; Zagreb Institute of Philosophy and Theology of Society of Jesus; Zagreb Croatian Institute for Bridges and Constructions; Zagreb Institute for Nuclear Technology; Zagreb Institute for Social Research; Zagreb Institute for Electro Engineering and Power; Zagreb Institute of Croatian Language and Linguistics; Zagreb Institute for Migration and Ethnic Studies; Mediterranean Institute Grga Novak, Hvar; Multimedia Warehouse WMC – Digital Ltd., Zagreb; Salesianum Institute for Religious Pedagogy and Catechism; Energy Institute Hrvoje Požar (evaluation started in July 2008).

The National Council for Science, at its sessions, made final decisions regarding evaluated scientific organisations and sent these, via ASHE, to the Minister of Science, Education and Sports.

EXTERNAL AUDIT

ASHE promotes a culture of development and enhancement of quality assurance in the Republic of Croatia and provides support to HEIs and scientific institutions in setting up their internal systems of quality assurance. Furthermore, the Agency performs audits of quality assurance systems of HEIs in the Republic of Croatia so as to rate their effectiveness and ascertain their level of development.

The Handbook for Audit of Croatian Higher Education Institutions, developed by ASHE, was compiled using input from an external audit model, and from experience gained in the pilot of the CARDS 2003 project *Furtherance of the Agency for Science and Higher Education in its Quality Assurance Role and Development of the Supporting Information System*. The guidelines outlined in the document were adopted at the Rectors' Conference of 29 October 2008. As part of the pilot project: *Independent External Evaluation of Quality Assurance System at Three Higher Education Institutions*, ASHE tested the external model through the audit of internal quality assurance systems of selected HEIs. Three Croatian HEIs participated in the pilot project: Faculty of Civil Engineering University of Osijek, Faculty of Organisation and Informatics University of Zagreb, and Faculty of Engineering University of Rijeka. The external audit was carried out by both Croatian and foreign audit experts.

The aims of the Commission for Audit of HEIs' Quality Assurance System were as follows:

- To estimate how developed and harmonised the quality assurance system of a higher education institution was with the system outlined in *European Standards and Guidelines for Quality Assurance in the European Higher Education Area*;
- To evaluate examples of good European practice and use these to develop and enhance quality assurance systems at other Croatian institutions.

The first three phases of the external audit process at the three pilot faculties, have been concluded. A report summarising the observations and learnings of the first three phases is currently being developed. On the whole, the quality assurance systems currently in place at these faculties are in their initial development stage. Note that certain elements of each of the current system are beyond this initial development stage.





ASHE has recently paid special attention to educating and training experts for external evaluation, with an aim to develop the database of external audit experts. During 2008, the training of the first generation of external auditors was conducted. Participants were awarded ASHE certificates upon completion of training. The training of the second generation of experts has commenced.

Following is a summary of seminars/trainings for external auditors of HEIs:

- Seminar on the outcomes of the external audit pilot project, Zagreb, 17 April 2008;
- Workshop on external audit, 25 November, 2008;
- Seminars on ENQA's *Standards and Guidelines for Quality Assurance in the European Higher Education Area*, the *Audit Model*, and the *Guidelines for Internal Audit of Croatian Higher Education Institutions*, Zagreb, 8 December 2008;
- Presentations: *Norwegian Higher Education System*, and *Audit Model*, by Gro Hanne Aas, senior advisor in the Quality Audits Unit, Norwegian Agency for Quality Assurance in Education (NOKUT), Zagreb, 9 December 2008;
- Final workshop on external audit, Zagreb, 19 February 2009.

Cooperation with quality assurance (QA) units at Croatian HEIs:

In order to harmonise national higher education with European standards and to raise the level of quality culture in the Croatian academic community, ASHE organised series of seminars for representatives of QA units at Croatian universities and their constituents, and representatives of polytechnics and schools of professional higher education.



A short summary of the most common shortcomings that QA units identify as part of their daily activities are provided in the following table:

	UNIVERSITY	MAIN REMARKS
1.	University of Zagreb (37 participants)	<ul style="list-style-type: none">■ University is too large to be organised as a quality assurance system,■ A wish for the professionalisation of quality assurance system on HEIs,■ Not well informed about organisation details and work relating to the quality assurance system,■ Occasionally, insufficient level of cooperation of university management and QA units.■ Lack of materials and staff (mostly teachers),
2.	University of Osijek (17 participants)	<ul style="list-style-type: none">■ A wish for professionalisation of quality assurance system on HEIs,■ weak links with the economy,■ Buying instead of developing new technologies.
3.	University of Dubrovnik (13 participants)	<ul style="list-style-type: none">■ Lack of funding and administrative staff,■ Mobility problems because of a Croatian system of grades that is not harmonised with the systems of other countries,■ Lack of licensed software and professional literature (lack of understanding from the Ministry of Science, Education and Sports),■ Economy not well informed on changes in higher education.
4.	University of Split (18 participants)	<ul style="list-style-type: none">■ Desire for professionalisation of quality assurance system at faculties,■ Lack of financial and human resources,■ Necessary re-accreditations of study programmes,■ Difficulties in implementing ESG because Universities rather than faculties or individual study programmes are evaluated,■ Many HE stakeholders not acquainted with the system.
5.	University of Zadar (24 participants)	<ul style="list-style-type: none">■ Main sources of problems – approved programmes not in compliance with the Bologna process,■ Questions relating to joint studies should be regulated (universities currently unable to implement joint-degree and double-degree programmes),■ Inability to transfer knowledge and self-financing – fear of termination of humanities studies programmes (IP system should be improved),■ The Bologna process changes implemented too quickly,■ Work roles of people leading and administering quality assurance systems not defined
6.	University of Rijeka (18 participants)	<ul style="list-style-type: none">■ Student, teaching and administrative staff mobility obstacles,■ Weak cooperation with economy, especially in regional areas,■ Insufficient number of places for student work experience,■ Remark on the Information System of Higher Education Institutions (ISVU) – difficult access to needed statistical data and insufficient authorisations directly affect quality assurance system primary and secondary schools is necessary.
7.	University of Pula (22 participants)	<ul style="list-style-type: none">■ Quality assurance system not yet implemented due to recent separation from the University of Rijeka,■ Desire for professionalisation of quality assurance system,■ Lack of unified national strategy,■ The concept of ranking universities and self-financing is the ‘first step to the general trend of eliminating social sciences and humanities’,■ Assessment of competencies of the teaching staff in p

Further, two seminars were organised for representatives of polytechnics and professional higher education schools during which ENQA's *Standards and Guidelines for Quality Assurance in the European Higher Education Area* document was presented. Additionally, *the Audit Model*, *the Guidelines for Internal Audit of Croatian Higher Education Institutions*, and *the Norwegian Higher Education System*, were presented by a representative from NOKUT.

In March 2008, ASHE organised a seminar for representatives of Croatian art academies, led by professor John Butler, Head of School of Arts Birmingham Institute of Art & Design and professor Robert Baker, Head of Department of Fine Art, School of Art & Design Limerick Institute of Technology.

Finally, ASHE's Department of Quality Assurance conducted training sessions for ASHE staff on the subject of ASHE's quality management system, and the positioning of ASHE in the European system of quality assurance agencies. The sessions also covered internal audit outcomes and preparation methods for external audits.





SETTING NATIONAL BENCHMARKS

In 2008, ASHE started an initiative to set national benchmark standards with a goal of uniting all Croatian higher education stakeholders in defining standards important for the compatibility, comparability and transparency of study programmes.

This initiative can be acknowledged as the motivating point that started the setting of benchmarks in various scientific fields. Specifically, a commission has been nominated, and two working meetings have been held on the subject of setting benchmarks for the field of economics. A committee for the field of law has also been nominated.

National benchmarks define expectations on qualification standards for particular scientific fields. They describe what gives identity and wholeness to a discipline, as well as defining the knowledge and skills necessary of a graduate student to achieve competency in a particular discipline.

ASHE intends to publish benchmarks on particular scientific fields so as to clearly establish standards in Croatian study programmes. The benchmarks will be published with the cooperation of internal (HEIs) and external stakeholders (employers, companies, graduates), in line with the needs of Croatian society. In the process of setting specific benchmarks the professional standards of a particular area, as defined by external professional or regulatory bodies, will be taken into account.

It is important to emphasise that benchmarks for a specific area do not represent the national curriculum but serve as an outline of referential points in the framework of quality assurance. As such, they allow flexibility and innovation in the creation of study programmes in the context of the entire framework which has been established for a particular field by the academic community. Furthermore, these benchmarks are intended as a guide for those involved with designing, implementing and evaluating a particular study programme. They can serve as a tool to assist HEIs compare their models with peer institutions with an aim of finding ways of improving their current performance. Additionally, these benchmarks can also be of use to potential students and employers who are interested in information on qualifications standards in a particular area.



ANALYTICS AND STATISTICS

Setting tasks to improve the quality of higher education and science, quality assurance systems or evaluation procedures at all levels, requires relevant objective indicators and analysis.

Statistical overviews and analysis are vital starting points for various, more elaborate, research projects in the area of Croatian higher education and science, as well as a basis for important evaluations and recommendations.

ASHE plays a pioneering role in the collection and processing of data of the previously inadequately recorded resources of Croatia's system of higher education and science. ASHE's Department of Analytics and Statistics was developed from the core team which worked on creating MOZVAG, a support system created in accordance with the Bologna principles.

As one of its first activities, the Department used information from MOZVAG, the Central Bureau of Statistics, the Ministry of Science, Education and Sports, and European education database (EURSYDICE), in order to make a series of analysis and indicators about higher education in Croatia. This was developed into an appendix to the *Report of the National Council for Higher Education for 2005*, and presented to the Croatian Parliament in 2006. ASHE also included the comparison of some key indicators in higher education between Finland and Croatia as a special insert. Finland was chosen for its similarities in demographics as well as for having a developed knowledge society. It can be said that the indicators presented in the Report, which generated a spirited discussion in Parliament, motivated authorities to consider the measures necessary to change certain structural discrepancies in the Croatian higher education system.

A detailed defining of departmental activities was carried out in the framework of the second component of the CARDS 2003 project. The results highlighted a need to modify MOZVAG in order to cover a wider set of tasks. As such, the *National Information System of Higher Education and Science* (NISVOZ) was created. NISVOZ encompasses a considerably greater number of parameters for generating analysis and statistics on the area of higher education and science.

In 2008, ASHE carried out an analysis of the register of study programmes and the list published by the Rectors' Conference [Official Gazette No. 45/2008]. The analysis revealed numerous shortcomings in existing overviews. As a result, ASHE performed a series of activities to overcome these shortcomings. Upon ASHE's initiative, and with the cooperation of the Ministry of Science, Education and Sports, and the Council for Higher Education, one of the steps taken to overcome shortcomings was to identify limitations present in study programmes licensed in 2005. The outcome of the analysis of the National Council was an agreed and cleaned list of HEIs' study programmes (this list-filtering refers mainly to the separation of one-subject from two-subject courses in 'free combinations', as well as to the allocation of ECTS credits for two-subject courses). This simplified the creating of a handbook, which provides information on the state leaving exam, as well as the development of the accompanying information system.

Furthermore, ASHE consolidated information regarding accredited study programmes and the development of the *Register of Study Programmes*, which is the base for the development of a future online interactive database of study programmes. The aim of the database is to provide information regarding accredited study programmes and Croatian HEIs. The database should enable searches according to various criteria (type of study, institution providing the programme, place of study, etc.)

ASHE's Department of Analytics and Statistics, together with the Department of Higher Education, prepared a list of first cycle study programmes accredited according to the Bologna Declaration (undergraduate and graduate academic and professional studies). The basis for its development was a register of licences issued to date, in coordination with HEIs. The list of study programmes in the handbook for the state leaving exam (the exam will, from the academic year 2010/2011, be the only way of enrolment at HEIs) was compiled using the data from ASHE's first cycle programmes list.

ASHE carried out the conceptual preparation and collected the majority of data for the development of an internet browser containing study programmes. The University of Zagreb Computing Centre (SRCE) was tasked with the development of the browser, in accordance with current tendering procedures.

The collection of data for the *Helsinki Group on Women and Science* database was carried out by ASHE. The aim of this activity was to aid the Group in drafting an annual report on representation of women in science She Figures 2009.



The processing of data received from Croatian HEIs required checking of approximately 25,000 data input items, as well as performing nearly 100,000 mathematical operations (this information highlights the need for the improvement of NISVOZ).

NATIONAL INFORMATION SYSTEM OF HIGHER EDUCATION AND SCIENCE

During the CARDS 2003 project the *Furtherance of the Agency of Science and Higher Education in its Quality Assurance Role and Development of the Supporting Information System* it was recognised that MOZVAG system should be restructured into a more comprehensive project of creating the *National Information System of Higher Education and Science* (NISVOZ) which would encompass a considerably greater number of parameters for generating analysis and statistics from the area of higher education and science.

As a result, in June 2008, the Ministry of Science, Education and Sports' Directorate for Computer Science and Technologies, together with ASHE, appointed a working group responsible for preparing documentation for the public tender procedure requesting a conceptual design of NISVOZ.

The working group compiled the tender documentation draft. ASHE, with the help of independent consultants, carried out additional consultations and modifications of the tender documentation. In November 2008, the decision was made, and approved by the Ministry of Science, Education and Sports, that the competitive negotiation procedure should be used for the procurement of services. Bearing in mind the project specifics, negotiation procedure with five higher education institutions was initiated.

In order to realise two key premises for the development of the adequate conceptual design, the system specifications referring to the competences and profiles of the project team key experts established strict requirements, as follows:

- Competency and comprehension of key elements important for recognising resources and quality of higher education and science in accordance with the Bologna reform;



- Involvement and adaptation of existing IT resources at HEIs in order to avoid duplication in data delivery.

ASHE has also appointed a tendering procedure commission, composed of university professors, representatives of the Ministry of Science, Education and Sports, and representatives of ASHE. The Department of Statistics and Analytics provided administrative support to the commission's work.

The base requirements of this system are:

- To provide an IT system to support all evaluation procedures carried out by the national councils and ASHE;
- To build a database capable of generating statistical overviews and analysis, data which would be used by policy makers to assist in decisions relating to the development and enhancement of the network of HEIs;
- To show, based on the analysis of input data:
 - a) Resources of HEIs and their ability to provide an adequate level of teaching;
 - b) Price of study per student according to types of study programmes – areas, fields, etc.
 - c) Analysis of necessary resources and the investment required in order to improve learning outcomes;
 - d) Analysis of teacher to student interaction ratio and analysis of students' study environment conditions;
 - e) Overview and analysis of a student's progress;
 - f) Analysis of any obstacles to a student's learning, such as resources and teaching configuration, but also considering detail of student's previous education institutions and their academic standard, a student's social environment, and the influence of the labour market on study motivation.



INTERNATIONAL PROJECTS

CARDS 2003 Programme

May 2008 saw the end of the CARDS 2003 project: *Furtherance of the Agency for Science and Higher Education in its Quality Assurance Role and the Development of the Supporting Informatisation System*. The specific goals of the project were:

- Strengthening the role of the Agency for Science and Higher Education in the area of quality assurance of HEIs;
- Establishing a national quality assurance network;
- Developing an information system to support quality assurance processes in the Croatian academic community.

The project, worth 600,000 euros, was financed by the European Union, and implemented by an international consortium led by GOPA Consultants from Germany, in association with Croatian company Nobium Ltd.

Matra Programme

During 2008 ASHE continued with the activities of the MPAP (*Matra Pre-accession projects programme*) project *Strengthening the Role of Croatian ENIC/NARIC Office*. The project started in 2007, in cooperation with the governmental institutions of the Netherlands, together with Croatian partners – the Ministry of Science, Education and Sports and the Ministry of Economy, Labour and Entrepreneurship.

The project objectives were to steer professional recognition for regulated professions towards authorised chambers, professional organisations and similar institutions, as well as dissemination of information on professional and academic recognition in order to bring the existing Croatian recognition-related legislation into line with the European Directive 2005/36/EC, and to create administrative and institutional preconditions for the best possible practice.

The recognition of professional qualifications encompasses a great number of different legal areas. In order to achieve the main project goals, being the formulation of a plan for the alignment of Croatian legislation with the requirements of European Directive 2005/36/EC, it was necessary to carry out an analysis of the initial process. The analysis served as a basis for the strategic development of a system for the mutual recognition of foreign qualifications in the Republic

of Croatia. Consultants from the Netherlands' governmental institutions aided in the adopting of the *Acquis Communautaire* for the Croatian public sector and establishing inter-sector cooperation.

Throughout the course of the project the National ENIC/NARIC Office was in regular contact with the representatives of various institutions whose scope of work covered various regulated professions and who will, once Croatia becomes the EU country, have certain roles in the recognition of foreign qualifications according to Directive provisions.

Suggestions for an appropriate legal framework and administrative structure for the recognition of qualifications in regulated professions were drafted in cooperation with these institutions.

During the implementation of the project, it was proposed that the Croatian ENIC/NARIC Office should take on the role as national contact point and as such provide information on national legislation. This would, according to Directive 2005/36/EC, designate the Office as the provider of information on the national legislation that regulates professions, including social legislation and ethical regulations. Under this proposal, ENIC/NARIC would also be tasked with assisting citizens to achieve the rights given to them by the Directive, in cooperation with other contact persons and relevant authorities.

As part of the scope of the *National Database for Recognition of Professional Qualifications for Regulated Professions* project, an IT programme to assist the National ENIC/NARIC Office in their Directive 2005/36/EC recognition activities was developed.

The programme will include data on regulated professions in the Republic of Croatia, as well as information on bodies responsible for certain professions and regulations, and will at the same time serve as a tool for evaluating processes of recognition of foreign qualifications according to requirements of the Directive.

The project ended successfully in November 2008, when the final conference for dissemination of project results was held.



Applying for IPA Funds

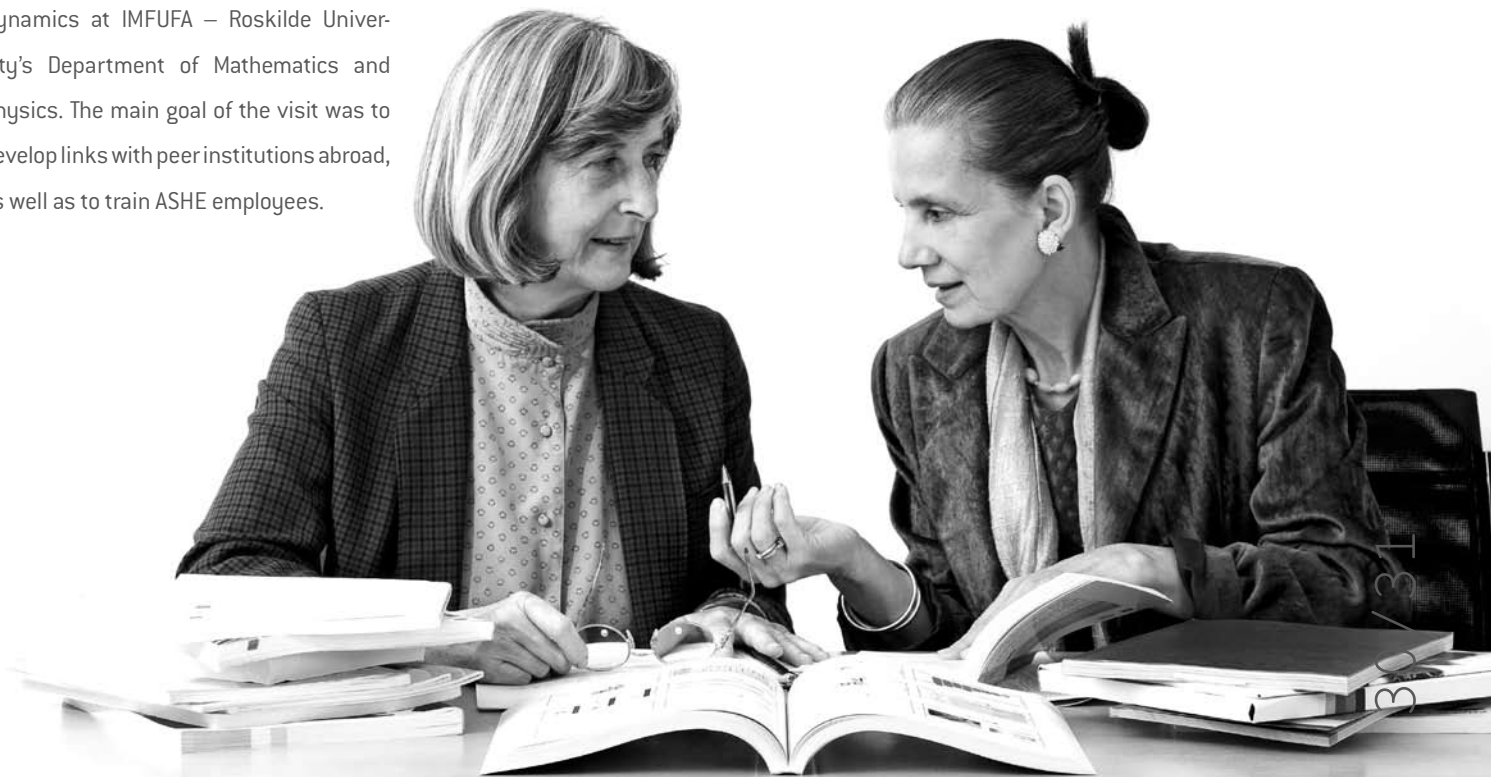
ASHE submitted two IPA (*Instrument for Pre-accession Assistance*) project proposal applications:

1. *Strengthening the Role of ASHE in the Evaluation of Scientific Institutions and Scientific Projects and Enhancing Cooperation of Science and Private Sector*, IPA 2008, Component I;
2. *Development of a Model for Informatisation of Enrolment Process at Croatian Higher Education Institutions*, IPA 2007, Technical Assistance Facility.

TAIEX Programme

During 2008, the Croatian ENIC/NARIC Office was involved in an exchange of experiences and a transfer of knowledge with other ENIC and NARIC centres in Europe. Office employees participated in study visits to European ENIC and NARIC centres. They also attended the annual meeting of the ENIC and NARIC Networks' working groups, as well as their periodic meetings. These visits were financed mainly by TAIEX (*the Technical Assistance and Information Exchange Instrument*) of the Directorate-General Enlargement of the European Commission. The experience gained during these visits proved valuable in the Office's daily working activities.

In November 2008, ASHE's Department of Science visited the Danish Agency for Science, Technology and Innovation, the Danish National Research Foundation, and the Danish National Research Foundation Centre for Viscous Liquid Dynamics at IMFUFA – Roskilde University's Department of Mathematics and Physics. The main goal of the visit was to develop links with peer institutions abroad, as well as to train ASHE employees.



STATE LEAVING EXAM AND APPLICATIONS TO HIGHER EDUCATION INSTITUTIONS

Late in 2008, ASHE was involved in the *Towards the State Leaving Exam* education campaign that took place at all four-year secondary schools in Croatia. The campaign was initiated by the Ministry of Science, Education and Sports, and involved the following institutions: the National Centre for External Evaluation of Education, the Education and Teacher Training Agency, the Agency for Vocational Education and Training two key premises for the development of the desired conceptual design, and ASHE. All institutions participated in school visits and provided both administrative and professional support to the campaign.

ASHE has been involved in the activities of the working group responsible for developing a conceptual solution for the implementation of the state leaving exam and the process of applying to HEIs. Additionally, ASHE worked on the development of a project proposal for an information system to support the Central Applications Office in formulating admission lists for HEIs.

National Information System for Applications to Higher Education Institutions

In 2008, the development of the *National Information System for Applications to Higher Education Institutions* (NISpVU), as a unique system to manage applications for the state leaving exam, as well as applications to study programmes of HEIs, commenced. ASHE and other important stakeholders participated in the development of a conceptual solution for NISpVU, and defined its scope of activities. The cooperation of a great number of stakeholders resulted in an effective and well-functioning system. Pursuant to the *Quality Assurance in Science and Higher Education Act*, the Central Applications Office will be established in ASHE and it will serve as a central organisational structure responsible for the entire system of applications to HEIs' study programmes.



LEGISLATIVE CHANGES

QUALITY ASSURANCE IN SCIENCE AND HIGHER EDUCATION ACT

The harmonisation of study programmes and their implementation in accordance with the Bologna Declaration principles was carried out in accordance with the current Scientific Activity and Higher Education Act [Official Gazette No. 123/03, 105/04, 174/04, 2/07 – CCRC Decision, and 46/07]. The Act was the first step of the Republic of Croatia towards its integration into the European Higher Education Area.

However, the Act did not define all obligations that Croatia accepted with the signature of the Bologna Declaration, especially those relating to aspects of quality assurance and enhancement which, among others items, included the implementation of the *European Standards and Guidelines for Quality Assurance in the European Higher Education Area*, a strategic document adopted at the Bergen Ministerial Conference in 2005.

The focus of future activities relating to this higher education and science integration will be external and internal quality assurance and quality enhancement. This is evident in documents delivered at ministerial conferences held after the acceptance of the Bologna Declaration. The external system of quality assurance and enhancement includes an evaluation and assessment of the quality of the evaluation subject, based on the criteria of objectivity and transparency. The internal system of quality assurance and enhancement is a system of measures and activities through which evaluation subjects prove their efficiency, responsibility, and ability to meet the quality outcomes expected of their educational and scientific activities.

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In light of these integration requirements, it was necessary for the Republic of Croatia to define all processes and stakeholder roles in the quality assurance and quality enhancement system, notably the National Council for Science,

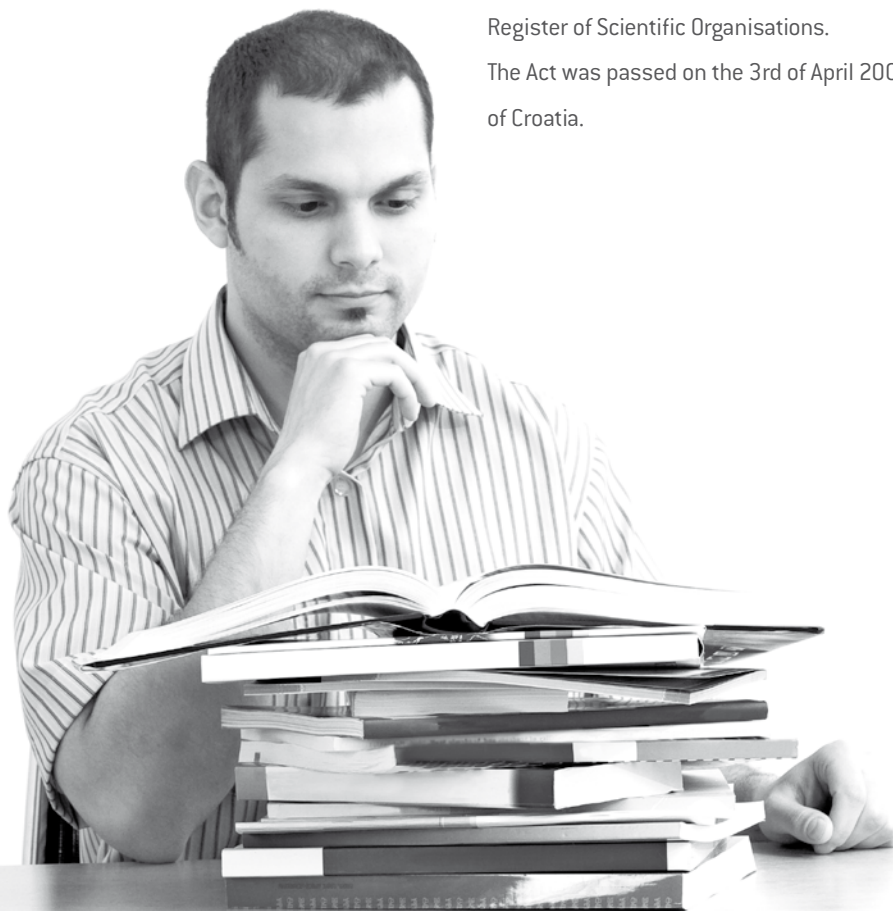
the National Council for Higher Education and ASHE. This was achieved through the *Quality Assurance in Science and Higher Education Act*, exercised jointly by the Ministry of Science, Education and Sports and ASHE.

This Act regulates:

- Quality assurance and enhancement in science and higher education through the following procedures: initial accreditation, re-accreditation, thematic evaluation and audit;
- The status, activity and organisation of ASHE as a Croatian public institution tasked with quality assurance and enhancement in science and higher education;
- The role of other Croatian institutions responsible for quality assurance and enhancement in science and higher education.

Provisions of this Act apply to both public and private HEIs, public scientific institutes and other scientific organisations established by the Republic of Croatia, as well as to private institutes and other legal persons enrolled in the Register of Scientific Organisations.

The Act was passed on the 3rd of April 2009 by the Parliament of the Republic of Croatia.



CROATIAN QUALIFICATIONS FRAMEWORK

ASHE participates in numerous activities of the Croatian Government Committee responsible for developing the Croatian Qualifications Framework (CROQF), as well as the Operational team which supports the work of the Committee. The Operational Team is comprised of representatives of institutions from all levels of education (from secondary to higher education).

The Operational Team is responsible for the following activities:

- Preparing materials and documents for the development of CROQF according to the work plan accepted by the CROQF Committee;
- Organising and participating in expert meetings according to the work plan;
- Preparing recommendations relevant to the institution of the representative;
- Presenting outcomes at expert meetings.

In 2008 the Operational Team held four workshops covering details defined in the following documents: *Work plan for 2008 and the Action plan until 2012*. Individual members of the Operational Team also organised additional working meetings for smaller, thematically organised groups. The team also participated in various conferences and published articles relating to CROQF in order to inform the public of its activities.

RECOGNITION OF FOREIGN HIGHER EDUCATION QUALIFICATIONS

In 2008, the National ENIC/NARIC Office received 1,215 requests for recognition of foreign higher education qualification, that is, 22 per cent of total number requests received from January to March 2009. According to available data, large majority of requests for recognition was submitted by Croatian citizens that obtained their qualifications at higher education institutions abroad, while minority of requests was submitted by foreign citizens, mainly for the purpose of employment in the Republic of Croatia.

Out of total number of requests for recognition, 89% of foreign higher education qualifications were obtained by Croatian citizens, while 11% of qualifications were obtained by foreign citizens.

As in previous years, most foreign higher education qualifications asking for recognition was acquired in one of the neighbouring countries, mostly in Bosnia and Herzegovina.

In October 2008 the National ENIC/NARIC Office revised and published a new info leaflet on the recognition of foreign higher education qualifications, containing information on the recognition of foreign higher education qualifications in the Republic of Croatia. The leaflet was distributed to all Croatian HEIs, as well as ENIC and NARIC Centres in Europe.

The need for more accurate and detailed criteria for evaluation of foreign higher education qualifications has occurred during the process of evaluation in the last three years. As a result of that need, and in line with the Act on Amendments to the *Act on Recognition of Foreign Education Qualifications* (Official Gazette, No. 138/2006) the Croatian ENIC/NARIC Office developed the *Criteria for Evaluation of Foreign Higher Education Qualifications*. These criteria are in line with best European practices, and define basic elements of evaluation of foreign higher education qualifications. The Office will continue to work on enhancing criteria, and on their alignment to the Lisbon Recognition Convention principles.

In July 2008, ASHE joined the project UNESCO *Portal on Higher Education Institutions*.

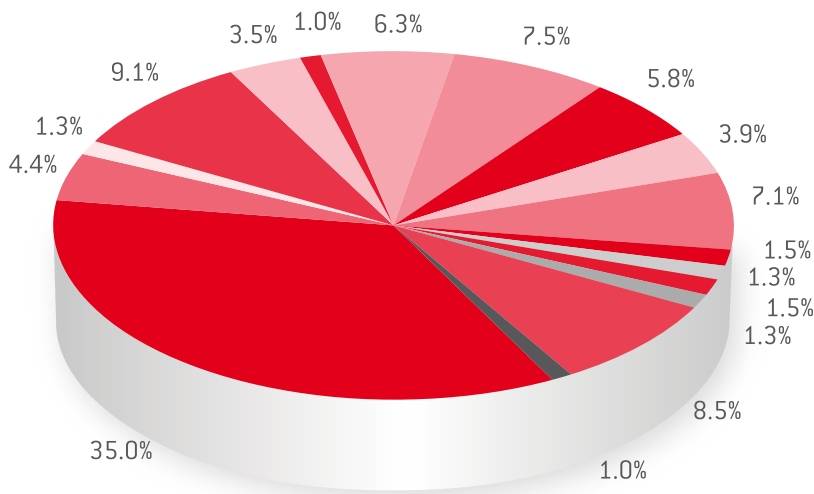
The National ENIC/NARIC Office operates as a national contact point responsible for providing and updating information on Croatian higher education system, and higher education institutions in Croatia.





RECOGNITION OF FOREIGN HIGHER EDUCATION QUALIFICATIONS - STATISTICS

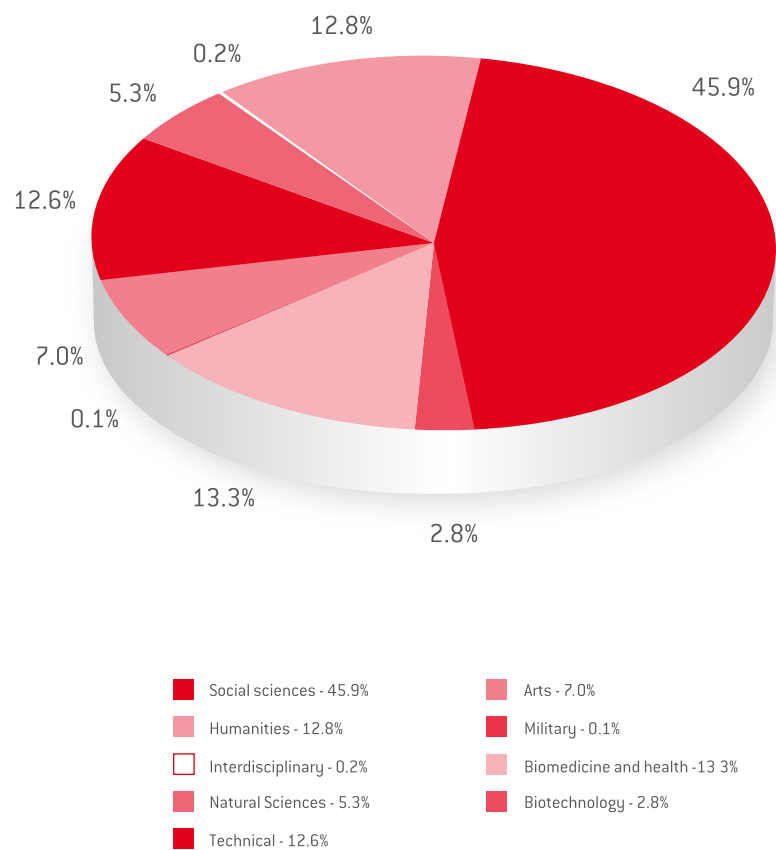
Number of applications for recognition of foreign higher education qualifications (in %)



- Bosnia and Hrezegovina - 35.0%
- Austria - 4.4%
- Australia - 1.3%
- Other countries - 9.1%
- Great Britain - 3.5%
- Switzerland - 1.0%
- Serbia and Montenegro (prior to Montenegrin independence) - 6.3%
- Serbia - 7.5%
- Germany - 5.8%
- Slovenia - 3.9%
- United States of America - 7.1%
- The Russian Federation - 1.5%
- The Netherlands - 1.3%
- Hungary - 1.5%
- Canada - 1.3%
- Italy - 8.5%
- France - 1.0%



Number of applications for recognition of foreign higher education qualifications by scientific field



TEMPUS PROGRAMME

The Croatian National TEMPUS Office is responsible for administering and promoting the TEMPUS programme (*the Trans-European Mobility Scheme for University Studies*) in the Republic of Croatia, as well as for supporting both existing and potential partners of TEMPUS projects. The Office plays an important role in maximising the use of funds donated by of the European Commission, as well as supporting the higher education reform in the Republic of Croatia. Activities of the National TEMPUS Office are defined in the agreement signed between the European Commission and ASHE, the National TEMPUS Office.

Under the TEMPUS III programme (2000 to 2006), 68 Joint European Projects and 19 Structural and Complementary Measures received funding from the European Commission. The TEMPUS III programme contributed to the implementation of the *Scientific Activity and Higher Education Act*, particularly in the field of restructuring existing, and implementing new study programmes.

In the new, fourth phase of the programme (TEMPUS IV, 2007 – 2013), nine national and regional Joint Projects and Structural Measures, worth 3 million euros, have been funded.

The National TEMPUS Office performs and/or is involved with the following:

1. Activities related to the evaluation of short-listed TEMPUS project proposals;
2. Monitoring activities;
3. Informational and promotional activities;
4. Cooperation with the European Commission;
5. Cooperation with the Delegation of the European Commission, the Ministry of Science, Education and Sports, and the Ministry of Finance;
6. Development of the Strategic Action Plan and cooperation with the Bologna experts;
7. Administrative activities of the Croatian TEMPUS Office.

1. Activities related to the evaluation of short-listed TEMPUS project proposals

- Evaluation of 14 project proposals short-listed in the First Call for Proposals under TEMPUS IV programme (deadline for applications 28 April 2008);
- Participation in modifying project application forms.



2. Monitoring activities

- Organisation, monitoring, and reporting for ten current TEMPUS projects that started in 2007, and are being implemented by Croatian HEIs.

3. Informational and promotional activities

- In 2008, the Croatian TEMPUS Office organised the National TEMPUS Information Day at the University of Zagreb, and two local TEMPUS information days at Rijeka and Split universities. The purpose of these events was to inform HEIs, as well as other potential stakeholders about the new programme, and about funding possibilities under the April Call. Additionally, a TEMPUS workshop for HEIs' representatives with elaborated project ideas was organised at ASHE premises;
- The handbook *TEMPUS III in Croatia (2000-2006)* was prepared and published, providing information on the Croatian higher education system, as well as a detailed list of all TEMPUS projects funded by the European Commission for the period 2000-2006;
- The leaflet *TEMPUS IV in Croatia* was prepared and published, containing basic information on the new programme phase, and the new Call for Proposals in 2008;
- The Office participated at various projects' meetings, including meetings with potential project partners;
- A detailed database of TEMPUS projects was developed, and can be found on the ASHE web page.

4. Cooperation with the European Commission

- Participation at two *TEMPUS Projects Representatives Meetings* held in Brussels, March and September 2008.

5. Cooperation with the Delegation of the European Commission, the Ministry of Science, Education and Sports, and the Ministry of Finance

- Daily contacts with the aforementioned institutions in relations to: TEMPUS project co-financing, VAT exemption, conversion of foreign exchange funds for the needs of the Office, promotional activities, etc.

6. Development of the Strategic Action Plan (SAP) and cooperation with the Bologna experts

- Cooperation with the Bologna experts and HEIs, and organising events, as follows:
- Seminar *Support to Higher Education in the Context of the Bologna Process in Croatia*, University of Split, March 2008;
- Seminar *Student and the Bologna Process seminar*, University of Rijeka, May 2008;
- Seminar *Quality Assurance and Evaluation in Teaching*, University of Zagreb, June 2008;
- Editing a leaflet *What (do) I need to know about the Bologna Process* – the first Aid for Students; the leaflet was published in 50,000 copies, and distributed to all HEIs in the Republic of Croatia.

7. Administrative Activities of the Croatian National TEMPUS Office

- Assembling the work plan and budget for the Office, as well as reporting on performed activities, and spent funds.

MEMBERSHIP IN INTERNATIONAL ASSOCIATIONS

ASHE is making focused efforts to join the international community of quality assurance in higher education and science, and to become its recognised and active member.

ASHE is involved in activities of the European and international networks of national information centres on recognition and mobility (ENIC and NARIC networks), as well as the activities of TEMPUS network offices (in other partner countries) and national contact points (in EU member states).

In November 2006, ASHE became a full member of the *International Network for Quality Assurance Agencies in Higher Education* (INQAAHE), and an associate member of the *European Association for Quality Assurance in Higher Education – ENQA* in December 2007. The associate status represents a state of preparation for full membership to ENQA for which ASHE will shortly apply.

In April 2008, ASHE became a member of the CEE Network (*the Central and Eastern European Network of Quality Assurance Agencies in Higher Education*).

ASHE's strategy stresses the importance of fulfilling the requirements necessary to become a member of EQAR (*The European Quality Assurance Register for Higher Education*), as well as to become a full member of ENQA.

Additionally, in 2008, ASHE became a member of the OECD (*Organisation for Economic Co-operation and Development*) *Forum on Institutional Management in Higher Education* - IMHE.



QUALITY ASSURANCE FORUM

The *Forum for Quality in Higher Education* has been developed and tested by ASHE and is located on the ASHE web page (<http://forum.azvo.hr>).

The Forum serves as a platform for the exchange and dissemination of relevant QA information in the areas of higher education and science. All stakeholders in the area of Croatian HE can actively participate in the forum and suggest relevant QA themes for discussion.

The forum was launched during the CARDS 2003 project.



INTERNATIONAL ACITIVITIES & STAFF TRAINING

- ENQA workshop *Assessing educational quality-knowledge production and role of experts*, Oslo, 14 - 15 February 2008;
- Seminar *Qualitätstagung zur Evaluation und Qualitätssicherung an Hochschulen*, Katolische Hochschule für Sozialwesen, Berlin, 13 – 14 March 2008;
- CARDS 2003 project seminar *Quality of Teaching and Students' Assessment: Dimensions of Quality Assurance*, 16 April 2008;
- ENQA seminar *Internal QA-systems and the ESG*, Barcelona, 14 – 15 April 2008;
- 5th International Congress CIMQUSEF 2008 *Quality of Research: from Planning to Evaluation*, Marrakech, 22 – 24 April 2008;
- ENQA Seminar *First external evaluations of quality assurance agencies - lessons learned*, Paris, 10 – 11 July 2008;
- 13th IAU Thematic Conference *Higher Education and Research Addressing Local and Global Needs*, Utrecht, 15 – 18 July 2008;
- 30th Annual EAIR forum *Polishing the silver: Are we really improving higher education?*, Copenhagen, 24 – 27 August 2008;
- 10th International Conference on Science and Technology Indicators *Excellence and Emergence – A new Challenge for the Combination of Quantitative and Qualitative Approaches*, Vienna, 17 – 20 September 2008;
- 8th Programme on Institutional Management in Higher Education (IMHE) - Governing Board Meeting, Paris, 6 – 7 November 2008;
- Third European Quality Assurance Forum *Trends in Quality Assurance*, Budapest, 20 – 22 November 2008;
- ENQA Seminar on *Quality Assurance in Trans-national Education Quality Assurance in Trans-national Education – From words to action*, London, 1 – 2 December 2008;
- Scientific Council of CIMQUSEF 2008 - 5th International Congress of the Quality Management in the Systems of Education and Training - *Quality of Research: from Planning to Evaluation*, Marrakech;
- QA Forum, presentation *An Audit Model in Croatia: A Study Based on a Pilot Project of three Higher Education Institutions*, Budapest, 22 November 2008;
- TEMPUS Conference on Quality Enhancement in Higher Education, Cairo, May 2008;
- Seminar *Promoting Higher Education Reform: Quality Through Modernisation of Universities*, Zagreb, June 2008;
- Regional meeting on the subject of peer review in Eastern Europe;
- A meeting of ministries and agencies in South-East Europe on the subject of evaluation of scientific institutions, organised by the European Commission;
- Presentations: *Norwegian Higher Education System and audit models*, by Gro Hanne Aas, senior advisor in the Quality Audits Unit of NOKUT, Zagreb, December 2008;



- Workshops and seminars on EU funds/project management organised by the Central Office for Development Strategy and Coordination of EU Funds, and the Ministry of Foreign Affairs and European Integration;
- Study visit to the Danish Agency for Science Technology and Innovation, Copenhagen;
- ERI SEE (The Education Reform Initiative of South Eastern Europe) and ASHE seminar *Use of Information and Communication Technologies in the Quality Assurance Process of Higher Education Institutions and Study Programmes for representatives of QA agencies in the region*, 18 – 19 December 2008;
- Workshop *Fundraising in Higher Education*, for representatives of all Croatian higher education institutions, funded by the U.S. Embassy in Zagreb, the University of Split, October 2008;
- Seminar for representatives of Croatian art academies, presentations by professor John Butler, Head of School of Birmingham Institute of Art & Design and professor Robert Baker, Head of Department of Fine Art, School of Art & Design Limerick Institute of Technology, March 2008;
- Seminar *Development of a Common Understanding of Learning Outcomes and ECTS*, Portugal, June 2008;
- Training seminars on subjects of project application and project management in IPA Programme (*the Instrument for Pre-accession Assistance*);
- Study visit in the framework of the TEMPUS project *Training for EU-liaison officers in Croatian universities*, Saarbrücken/Alicante, May 2008;
- Study visits to the Swedish National Agency for Higher Education, and the Norwegian Agency for Quality Assurance in Education;
- TEMPUS *Project Representatives Meeting*, Brussels, May and September 2008;
- 15th Joint Meeting of the ENIC-NARIC Networks, Malta, June 2008;
- The ENIC and NARIC Networks Working Group meeting on *Global dimension of Recognition*, Brussels, December 2008;
- ISO 9001:2000 – related seminar for internal auditors, Zagreb;
- Seminar on project management, 3 – 4 March 2008;
- Baseline for the Development of the Croatian Qualifications Framework (CROQF), Zagreb, 20 May 2008;
- Seminar *Quality Assurance and Evaluation in Teaching and Learning*, Zagreb, 26 July 2008;
- Presentation *Quality Assurance System at ASHE*, Zagreb, 9 May 2008;
- Seminar *ASHE and its place in the European System of QA Agencies*, Zagreb, 29 May 2008;
- Seminar *Outcomes of Internal Audit and Preparation for External Audit*, Zagreb, September 2008;
- Workshop *Medicine and Health Quality Management Specifics*, 30 June 2008.

ASHE FINANCES

ASHE revenue comprised of seven activities:

- A621153 – the National Council for Higher Education;
- A621155 – administration and general transactions;
- A621179 – the National Council for Science;
- A621188 – evaluation of scientific institutions;
- A621187 – evaluation of HEIs;
- K621178 – equipment;
- T621188 – Tempus project.

Total revenue amounted to 17,000,731 KN, consisting of:

- State budget resources for 2008: 16,511,816 KN;
- Business revenue: 478,411 KN;
- Other revenue (interest): 10,504 KN.

ASHE expenditure in 2008 amounted to 19,956,012 KN, consisting of business expenditure - 19,303,569 KN, and expenditure for acquisition of non-financial assets - 652,443 KN.

ASHE expenditure was funded from the state budget, as well as from ASHE business revenue and international aid.

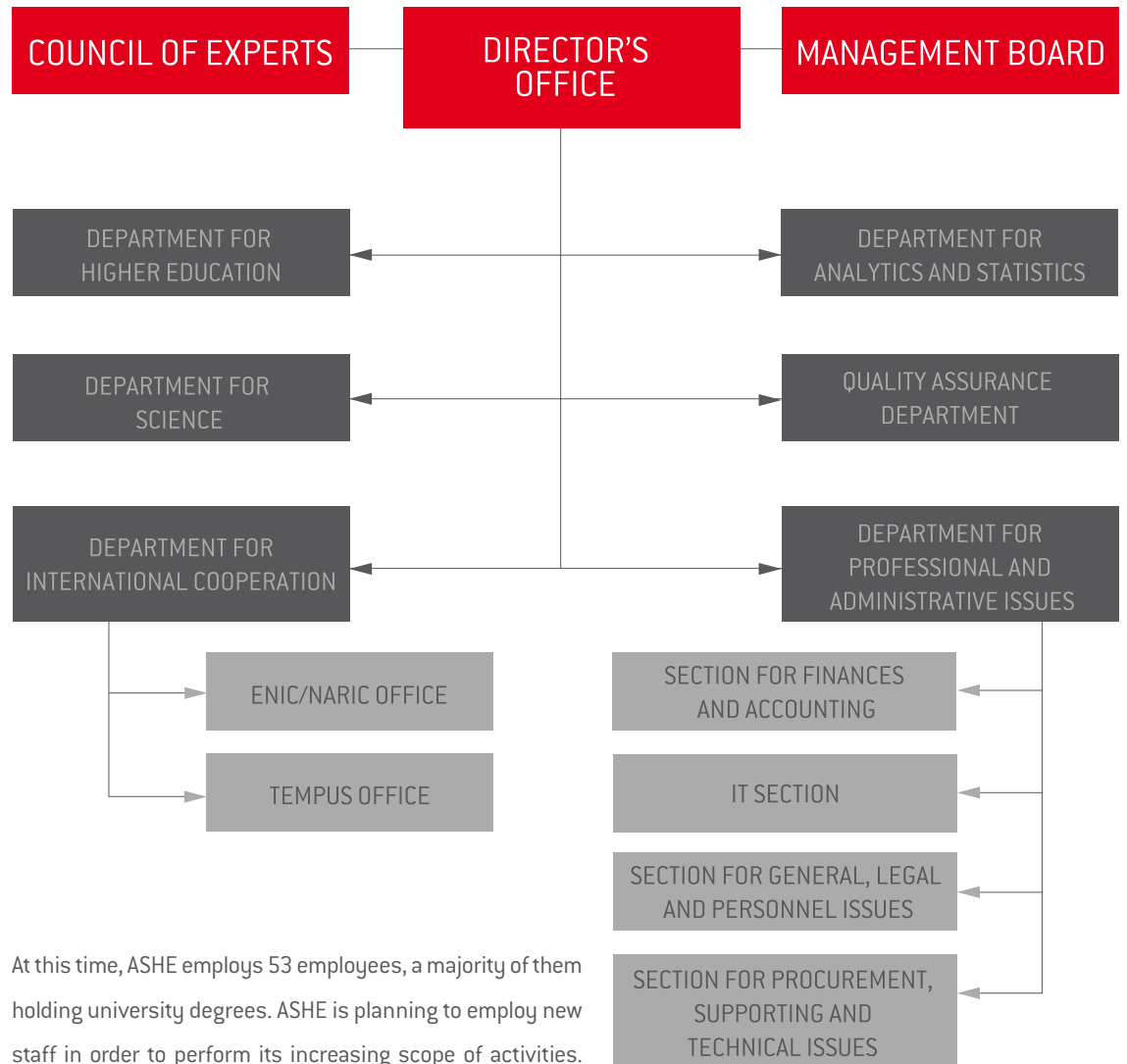
ASHE EXPENDITURE IN 2008:

EXPENDITURE	Kn
Business expenditure	19,303,569
Personnel costs	6,698,783
Salaries and salary contributions	5,597,246
Salary contributions	962,787
Other personnel costs	138,750
Material costs	12,569,034
Service costs	8,189,199
Remuneration costs	2,811,809
Material and energy expenditure	599,986
Other unnamed costs	968,040
Financial expenditure	35,752
Acquisition of non-financial assets	652,443
TOTAL	19,956,012





ASHE ORGANISATIONAL STRUCTURE



In November 2006, following decision of the Management Board of the Agency for Science and Higher Education, an ISO 9001-compliant System for Quality Management (SQM) was introduced at ASHE. In June 2008, an internal audit was conducted, and in October of the same year the external audit of SQM, organised by the Det Norske Veritas company, was completed.

The Management Board and ASHE's employees were presented the external audit results, which concluded that the system was well organised and oriented towards future enhancement.

Two seminars on SQM and ISO 9001 requirements were held for ASHE employees in 2008. The purpose of these seminars was to inform new employees about SQM and to train all employees to successfully carry out an external audit. During the external audit ASHE was praised for its large number of trained internal auditors, as well as on efficient planning of ASHE's activities.



ASHE IN 2009

In light of the current economic situation in Croatia and Europe that requires rationalisation of public administration, and in line with the needs of the higher education and science system, the Croatian Agency for Science and Higher Education sets five primary strategic goals for 2009:

1. Fulfilling necessary conditions for the implementation of the *Quality Assurance in Science and Higher Education Act*;
2. Fulfilling all preconditions for application to ENQA (European Association for Quality Assurance in Higher Education) and the Register (European Quality Assurance Register for Higher Education – EQAR);
3. Development and upgrading of information systems relevant to ASHE and higher education and science;
4. Disseminating quality assurance culture;
5. Enhancing the quality of services provided by ASHE.



ASHE's plan of activities for 2009:

1. Establish all bodies prescribed by the *Quality Assurance in Science and Higher Education Act*;
2. Develop general acts in accordance with the *Quality Assurance in Science and Higher Education Act*;
3. Develop a plan of activities based on the guidelines of the *Quality Assurance in Science and Higher Education Act*;
4. Finalise tasks outlined in the *Scientific Activity and Higher Education Act* (Official Gazette No. 23/03, 105/04, 174/04, and 46/07) and its appropriate bylaws in the field of science and higher education;
5. Carry out procedures of external quality assurance in science and higher education in accordance with the *Quality Assurance in Science and Higher Education Act*;
6. Train higher education and science stakeholders;
7. Provide professional support to the QA units at Croatian HEIs;
8. Coordinate establishment of the national benchmarks for scientific fields;
9. Improve the internal quality assurance management model;
10. Analyse and develop national quality assurance system;
11. Develop an integrated *National Information System of Higher Education and Science* (NISVOZ);
12. Develop a database of evaluation experts (evaluators, auditors, etc.);
13. Develop a register of accredited study programmes in the Republic of Croatia;
14. Develop a set of suggested changes and modifications to the *Act on the Recognition of Foreign Education Qualifications*;
15. Develop a programme for planning, tracking and following-up the evaluation activities of HEIs and scientific organisations;
16. Research international quality assurance systems;
17. Further develop cooperation with sister agencies abroad;
18. Professional training of ASHE employees;
19. Employ new staff to perform new activities that ASHE will take over as prescribed by the *Quality Assurance in Science and Higher Education Act*.

ASHE... that's us !

agency for science and higher education

