The Role of Transparency in Quality Enhancement of Higher Education

Ria Bilić, Ninoslav Šćukanec, Matija Sinković, Nikolina Svalina, Slobodan Škopelja, Marko Turk
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PREFACE

Project publication “The role of transparency in quality enhancement of higher education” is the final publication of the project „QUALITYWATCH: Croatian Higher Education Quality Watchdog“. The main objective of this project was to increase the visibility of higher education quality assurance policies as well as to improve access to and transparency of existing results of the assessments and evaluations of the quality of higher education institutions.

In its present form, Croatia’s higher education quality assurance system has existed since 2009, when it was legally and normatively established by the Act on Quality Assurance in Science and Higher Education. Today we can say that Croatia has a well-developed, functional and high-quality system of external quality assurance of higher education institutions, which is under the jurisdiction of the Agency for Science and Higher Education (ASHE); however, there is still room for improving its transparency.

External quality assurance procedures have been regularly conducted since 2010, but it is questionable to what extent the implementation and results of these procedures are transparent and understandable to the interested public. As for internal quality assurance systems, which are the responsibility of higher education institutions themselves, their level of development is not yet uniform nation-wide, but varies between institutions. However, despite the different levels of development, it is possible to apply identical principles of transparency to these systems as well, so that information about quality would be readily available, understandable and legible to all interested parties.

National higher education systems have the responsibility towards students, their parents, employers, taxpayers and ultimately all Croatian citizens to carry out educational programmes that meet the required quality standards, thus fulfilling their social role as well. Regulation and establishment of aforementioned quality standards is in the domain of public institutions in the field of higher education, primarily the Agency for Science and Higher Education and the Ministry of Science and Education. These institutions are responsible for development, establishment and implementation of procedures for assurance and enhancement of quality, making decisions regarding the accreditation of individual higher education institutions and their programmes, and for informing the public about the final outcomes of these procedures. Like all other government bodies, aforementioned institutions are required to publicly, transparently and in a timely manner disclose information of public interest to the interested public.

The following question arises: What exactly is understood by transparent publication of information of public interest? QUALITYWATCH project starts from the premise that nowadays all public information must be published on the internet, i.e. on the websites of institutions responsible for these information. But sometimes publishing information on the internet is not sufficient: in case of quality assurance in higher education, a large number of documents is indeed published on websites of relevant institutions. However, the question arises as to how easily accessible, understandable and legible these documents are to interested individuals. For example, information about the quality of an individual higher education institution is of interest to a student who is considering which college to enroll into, a student unsure which graduate study programme she should choose because her preference is scientific research, a parent or a career counsellor who wants to help their child or student in deciding which institution to pick. Can they easily and quickly find their bearing in the very complex system of quality assurance and hundreds of pages of technical documents that arise as a result of its functioning? The authors of this publication believe that there is room for improvement in this area.
For this reason, the main objective of the QUALITYWATCH project is increasing the visibility of higher education quality assurance policies and improving access to existing results of the assessments and evaluations of the quality of higher education institutions.

Beside this main goal, the project also defines several specific objectives:

- develop mechanisms for monitoring higher education quality assurance policies
- advocate for improving access and legibility of all available information on quality in higher education
- develop the capacity of civil society organizations to actively promote transparent and accountable implementation of quality assurance procedures in higher education.

QUALITYWATCH project was implemented over a period of two years and three months from 18 December 2014 to 18 March 2017. Institute for the Development of Education (IDE) was the lead partner on the project and its institutional partners were the Center for Peace, Non-Violence and Human Rights (Osijek), Association MI (Split), the Faculty of Humanities and Social Sciences Rijeka and the Ivo Pilar Institute of Social Sciences. Universitas Association for the Development of Higher Education was an associate partner on the project. Four international experts also took part in the implementation of the project: Liz Thomas (UK), professor and consultant in the field of higher education, Don F. Westerheijden (NL), professor and researcher at the Center for Higher Education Policy Studies (CHEPS) at the University of Twente, Andreas Raggautz (AT), professor and Director of Performance and Quality Management at the University of Graz, and Živa Kos (SLO), education policy researcher at the Faculty of Education, University of Ljubljana.

The project was financed through the IPA Transition Assistance and Institution Building Component (TAIB), and the funds were secured through the call “Reinforcing Support of CSOs in Enhancing Transparency and Good Governance in Croatian Public Administration (EuropeAid/134506/D/ACT/HR).

The principles, values and recommendations for improving the transparency of quality assurance system in higher education developed as part of the QUALITYWATCH project are not mandatory: they are recommendatory in nature and may be used arbitrarily by competent institutions and higher education institutions for the purpose of further improving this system. Detailed information on the QUALITYWATCH project and the electronic version of this publication are available for download on the project's website, www.ipa-qualitywatch.eu, and the website of the Institute for the Development of Education (www.iro.hr), and can also be obtained on request via the e-mail address iro@iro.hr.

Ria Bilić
INTRODUCTION

Project publication “The role of transparency in quality enhancement of higher education” presents the main results of the QUALITYWATCH project activities. It consists of a total of seven texts on the topic (of transparency) of quality assurance in higher education, organized into one coherent unit. Each of the texts featured in this publication is available separately on the website of the Institute for the Development of Education (www.iro.hr).

We open this publication with A Guide to Monitoring the Transparency of Quality Assurance in Higher Education: its main objective is to serve as a tool which will allow civil society organisations to more easily analyse public availability of internal and external quality assurance results and procedures at higher education institutions, analyse the level of development of the basic elements of quality assurance in higher education and understand official quality assessments of higher education institutions based on the official documents produced by higher education institutions and the Agency for Science and Higher Education (ASHE). Moreover, the Guide contains a brief and concise overview of the system and procedures of quality assurance in higher education in the Republic of Croatia. It is primarily intended for civil society organisations that want to positively influence changes in the area of higher education and transparency. However, it can also serve as a handy guide for researchers, policy-makers and the general public interested in monitoring the quality assurance process in higher education (for instance, students, pupils, parents, academic staff…).

Three reports on the transparency of higher education institutions’ quality assurance, drawn up based on the methodology developed in the Guide, follow next: they analyse the Zagreb County, Osijek-Baranja County and Split-Dalmatia County. Reports are the results of research conducted by project partners in their local communities by using an online questionnaire (Appendix I) and examining the official websites of higher education institutions. The aim of the reports is to provide a general picture of the transparency of quality assurance in higher education and of the level of quality of higher education in selected counties. Indirectly, we wish for these reports and the QUALITYWATCH project in general to illustrate the importance of quality assurance in higher education and to encourage higher education institutions to disclose information on quality assurance more transparently and systematically. Each report addresses three areas:

1. Transparency of external quality assurance and enhancement procedures
2. Transparency of internal quality assurance and enhancement procedures
3. Analysis of the official assessments of higher education institutions’ quality.

1. Besides civil society organisations, this Guide is intended to be used by all other types of organisations working on the issues on quality assurance and quality enhancement in higher education.
In order to contribute to a better access to and greater legibility of all available information on quality in higher education, all three reports are accompanied with numerous graphical and table overviews.

Following next is the **Feasibility Study for the Launch of a National Database for Quality Assurance and Quality Enhancement in Higher Education**. The existence of this kind of a national database would enhance the transparency of various data that are being collected or should be collected in the higher education sector. The study provides an overview of preliminary activities that would need to be carried out before launching such a database, an overview of the database’s possible content and examples of similar foreign databases that can serve as examples of good practice (UNISTATS, the Complete University Guide, U-Multirank and the Academic Ranking of World Universities - ARWU). Based on this, the Study provides proposals and recommendations for launching a Croatian national database, aimed primarily at education policy makers, and particularly at policy-makers at the Croatian Ministry of Science and Education and the Agency for Science and Higher Education (ASHE).

The final part of this publication consists of the **recommendations for improving the transparency of quality assurance** aimed at higher education policy-makers and decision-makers at higher education institutions. The recommendations presented are based on the conclusions and results of all the research conducted as part of the QUALITYWATCH project and we hope they will encourage all higher education institutions and competent public institutions in Croatia to increase the transparency of data relating to quality assurance. The recommendations are divided into three parts: the first part concerns the national external quality assurance system, the second part concerns the internal quality assurance systems at higher education institutions, and the third part focuses on the establishment of a national database on quality assurance in higher education.

Appendix I of this publication contains a theoretical introductory text about **teaching and learning in the context of quality assurance in higher education**. This part provides an overview of activities which aim to include teaching and learning into quality assurance procedures in Croatia, and a review of the two segments of the teaching and learning quality culture: the changing of the professional modus operandi of university teaching staff and the raising of the awareness of the active role of students in the design and evaluation of the teaching process.

Finally, Appendix II contains the **Questionnaire on the Transparency of Higher Education Quality Assurance Procedures** used by the researchers in drawing up the reports on the transparency of quality assurance in higher education. The online questionnaire was sent to key persons in charge of quality assurance as well as deans and vice-deans of every higher education institution in the above-mentioned counties.

RIA BILIĆ, MATIJA SINKOVIĆ

Ria Bilić, Matija Sinković

1.1. Goals and purpose of the Guide

The Guide to monitoring the transparency of quality assurance in higher education is intended to be used primarily by civil society organizations that wish to influence positive changes in the area of higher education and transparency. It can also serve as a practical guide for researchers, public policy makers and wider public (students, pupils, parents, academic staff, etc.) interested in monitoring quality assurance in higher education.

The main goal of this guide is to provide a tool for civil society organizations with which they can easily:

- analyse public availability of internal and external quality assurance results and procedures at higher education institutions
- analyse the degree of the development of fundamental elements of quality assurance systems in higher education
- understand official assessments of the quality of higher education institutions based on the official documents of higher education institutions and the Agency for Science and Higher Education (ASHE).

In this guide, you will find instructions that are primarily aimed at establishing the availability of data resulting from various quality assurance processes at higher education institutions. The guide also includes data on
the organization of the quality assurance system in Croatian higher education, the legislative foundation of this system, the types of evaluation procedures that make up this system and bodies that are in charge of implementing quality assurance procedures. The guide specifically outlines which documents are generally publicly available and which ones are not, despite the authors' belief that, in accordance with the principles of full transparency, they should be.

Based on this guide, partner civil society organizations involved in the QUALITYWATCH project (Institute for the Development of Education, MI Association - Split, Centre for Peace, Nonviolence and Human Rights - Osijek) produced three local, county reports on quality assurance at higher education institutions. The units of analysis that are the subject of this guide are higher education institutions in three counties included in the QUALITYWATCH project: Split-Dalmatia County, Osijek-Baranja County and the City of Zagreb. However, the guide is applicable in the analysis of any higher education institution in the Republic of Croatia. It contains instructions on how and what information to collect in order to evaluate the public accessibility of data on quality assurance at higher education institutions and to evaluate the quality of higher education institutions. Data resulting from external and internal quality assurance procedures at higher education institutions are evaluated in the process. In addition, based on the Agency for Science and Higher Education's official documents, an overview of official assessments of higher education institutions is provided while separate analyses of the transparency of internal and external quality assurance procedures at higher education institutions were conducted. Data on quality assurance procedures was collected at the level of higher education institutions, and then presented combined and interpreted based on different types of higher education institutions within each county.

The aim of the county reports is to provide a general overview of the transparency of quality assurance in higher education and of the level of quality of higher education institutions in selected counties. In the process of presenting the quality of higher education institutions, authors used the Agency for Science and Higher Education’s official data since individual higher education institutions’ quality assessments are under the jurisdiction of the Agency. Civil society organizations active in the field of higher education and participating in the QUALITYWATCH project want to contribute to the quality and transparency of these assessments and to the enhancement of quality culture in higher education in general. We believe that by analyzing the transparency of quality assurance in higher education and giving recommendations for improving the functioning of the whole higher education quality assurance system we can contribute to improving the quality of higher education institutions in the Republic of Croatia.

1.2. An overview of the higher education quality assurance system in Croatia

“Quality assurance” in higher education is a comprehensive term that is used to describe processes and activities undertaken to systematically determine, maintain and develop the quality of higher education. Although it is not easy to give a univocal definition of quality, according to the Act on Quality Assurance in Science and Higher education, "quality in higher education

2, Official Gazette, 45/09
represents a multifaceted and dynamic concept which emphasizes meeting generally accepted higher education standards while pursuing continuous improvement of all processes and their outcomes.” On the other hand, the European Commission defines quality in higher education (HE) as the ability of higher education institutions to equip students with knowledge, skills and transferrable competences they need to succeed after graduation. Here the emphasis is on the learning process that takes place within a high-quality learning environment that recognizes and supports excellent teaching.3 Similarly, the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)4 point out that quality “is mainly the result of the interaction between teachers, students and the institutional learning environment.” When it refers to quality assurance, the same document argues that quality assurance “should ensure a learning environment in which the content of programmes, learning opportunities and facilities are fit for purpose.”

The higher education quality assurance system is divided into internal and external system. **Internal quality assurance and enhancement system** is a group of measures and activities through which higher education institutions independently monitor and improve the quality of individual areas of their activities. The aim of these measures and activities is to ensure good quality outcomes of educational and scientific activities. An example of such a system would be the activities undertaken by quality assurance offices and committees at individual higher education institutions: the monitoring of the quality of teaching, quality and number of published scientific papers and conducted research, the implementation of student evaluations and similar.

**The external quality assurance system** refers to quality assurance of higher education institutions conducted by an authorized independent external body. It includes the evaluation and assessment of the quality of higher education institutions based on objective and clear criteria, as well as giving recommendations for improving the performance of evaluated institutions.

Quality assurance in higher education in the Republic of Croatia is based on the Act on Scientific Activity and Higher Education, Act on Quality Assurance in Science and Higher Education, and accompanying ordinances. Additionally, quality assurance is also regulated by statutes, ordinances and other documents adopted by individual higher education institutions and other relevant institutions (e.g., the Rectors’ Conference). All quality assurance procedures are harmonized and conducted in accordance with one of the fundamental documents of the Bologna Process, the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), which was adopted by the Republic of Croatia in 2006.

The key institution for external quality assurance is the Agency for Science and Higher Education (ASHE) - an independent and self-sufficient national agency for quality assurance in higher education and science. It was established in 2004 based on the European model of external quality assurance agencies in higher education with the aim of conducting external evaluations and improving the quality of scientific activity and higher education in Croatia. The Agency is a full member of two European umbrella associations for quality assurance: the European Association for Quality Assurance in Higher Education (ENQA) and the European Quality Assurance Register for Higher Education (EQAR).

1.2.1. Internal quality assurance

The internal quality assurance and enhancement system is a group of measures and activities through which higher education institutions ensure their efficiency and good quality outcomes of their educational and scientific activities. The internal quality assurance system is complementary to external evaluation procedures and every science and higher education institution regulates it autonomously through an ordinance, taking into account the European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).
In accordance with the guidelines, when establishing an internal quality assurance system higher education institutions must keep in mind the following areas:

- Policy and Procedures for Quality Assurance
- Approval, Monitoring and Periodic Review of Study Programmes and Awards
- Assessment of Students
- Learning Resources and Student Support
- Quality Assurance of Teaching Staff
- Information Systems
- Public Information.

Alongside the above areas, most higher education institutions also assess the quality of the following areas:

- Research activity and artistic activity
- Professional activity
- Mobility and international cooperation
- Resources supporting educational, research, artistic and professional activities.

For every quality assurance area the following is defined:

(A) **Standard**: declaration of the expected level of requirements and conditions based on which quality is assessed.

(B) **Goal**: setting a benchmark that the institution strives towards in ensuring quality and in reference to which achievements are determined.

(C) **Activities**: a series of activities and actions through which defined quality goals are pursued, while specifying: the implementation timeline; the bodies responsible for proposing/producing and verifying/adopting; and the indicator of success of implementing a particular activity.

(D) **Examples of good practice**: existing actions the application of which can improve the quality of educational, research, artistic or professional activity.

When establishing an internal quality assurance system, higher education institutions frequently adopt the following documents:

- **Quality assurance policy**: a concise document that defines the founding principles, methods and organizational structure of a higher education institution’s quality assurance system.

- **Quality assurance strategy**: a document that determines the quality assurance vision, mission and development goals from which specific tasks and plans for their implementation are derived.

- **Quality assurance guide**: a publication that contains the necessary quality assurance terminology, standards, procedures, plans, and activities and serves as guidance and help to all higher education stakeholders in developing and enhancing the quality assurance system and in promoting the quality culture.

- **Quality assurance ordinance**: a document that defines the regulatory framework of a higher education institution’s quality assurance system.

In addition, higher education institutions frequently also form **central quality assurance units/commissions/committees** that are in charge of quality in various areas of operations, and **quality assurance management offices** through which they perform administrative and technical tasks related to quality assurance.
1.2.2. External quality assurance

External quality assurance and enhancement system includes evaluation and assessment of the quality of higher education institutions, study programmes that they implement and a part or all of the activities that they perform. All evaluations are based on objective and clear criteria defined by the national legislative framework and developed based on the ESG. All external higher education quality assurance procedures are carried out by the Agency for Science and Higher Education. It is important to point out that the external quality assurance of higher education institutions in Croatia includes, on the one hand, evaluating higher education activities and, on the other, evaluating scientific activities. In addition, all institutions that perform scientific activities but are not part of the higher education system also undergo external evaluations. However, scientific institutions that are not part of the higher education system are not included in the QUALITYWATCH project or this guide. Therefore, this section does not include external evaluation procedures that apply to them.

The evaluation procedures are:

(A) Initial accreditation
(B) Re-accreditation
(C) Thematic evaluation
(D) Periodic independent external audit of the internal quality assurance system.

A. Initial accreditation

Initial accreditation establishes whether necessary requirements are met when a new higher education institution or scientific organization is being established or when a new study programme is being launched. The requirements were defined by the Ministry of Science and Education (MSE). Initial accreditation includes several procedures:

The initial accreditation for performing higher education activities

The initial accreditation for performing higher education activities is carried out in accordance with the Procedure for the Initial Accreditation for Performing Higher Education Activity and starts with the applicant submitting an application for the licence to perform higher education activities, which is submitted to the Ministry of Science and Education.

Alongside the application, the applicant must submit all necessary documentation stipulated by the Act on Quality Assurance in Science and Higher Education.9

Based on the submitted documentation and the expert opinion of the Accreditation Council,10 ASHE determines whether necessary requirements for establishing a higher education institution are met and recommends to MSE to grant approval to the applicant to establish the higher education institution. Based on the recommendation, MSE may:

9. Required documentation includes: 1. a contract with an existing higher education institution on joint implementation of a study programme that has a licence; 2. a constituting document; 3. a study on the establishment of an institution, which includes a feasibility study concerning the establishing and implementation of planned study programmes, pursuant to the Network of Higher Education Institutions and Study Programmes, and which was developed in cooperation with higher education teachers teaching in the field of the study programmes for which the application is being submitted; 4. proof of adequate facilities and equipment; 5. bank guarantees, submitted by private higher education institutions for the purpose of continuation and completion of studies in case the institution ceases to operate or to implement a particular study programme; 6. proof of meeting requirements for performing scientific activities if the applicant is a higher education institution that plans to implement university-level study programmes.

10. The Accreditation Council is the Agency for Science and Higher Education’s expert committee comprising of representatives of science and higher education as well as business.
Grant approval to the applicant to establish the higher education institution; or
Deny approval to the applicant to establish the higher education institution.

The initial accreditation of private higher education institutions, public university colleges of applied sciences and universities of applied sciences to implement study programmes

The initial accreditation of study programmes is carried out pursuant to the Procedure for the Initial Accreditation of Study Programmes and begins when the Ministry of Science and Education receives an application for implementing a new study programme. The initial accreditation procedure is launched when a new study programme is developed or when changes are being introduced to an existing accredited study programme. It is important to point out that public universities have autonomy when it comes to initial accreditation of their study programmes: they carry out the initial accreditation independently and the public university's Senate makes the decision on it. On the other hand, the initial accreditation of study programmes implemented by private universities, as well as private and public universities of applied sciences and university colleges of applied sciences is carried out by ASHE.

Alongside the application for the implementation of a new study programme, the applicant must submit all required documentation stipulated by the Act on Quality Assurance in Science and Higher Education. Based on the submitted documentation and the expert opinion of the Accreditation Council, ASHE determines whether necessary requirements for launching a study programme have been met, after which it forwards an Accreditation Recommendation to MSE to issue the study programme implementation licence to the applicant. Based on the recommendation, MSE may:

Issue the licence for implementing the proposed study programme; or
Withhold the licence for implementing the proposed study programme.

The initial accreditation for performing scientific activities

All public science institutes and all science organizations (including public higher education institutions) that were established by the Republic of Croatia, as well as private science organizations (including private higher education institutions), may begin performing scientific activities only upon obtaining the licence for performing scientific activities. The initial accreditation for performing scientific activities is carried out pursuant to the Procedure for Initial Accreditation for Performing Scientific Activity and begins by submitting an application for the licence for performing scientific activities, alongside accompanying documentation, to MSE. Based on the submitted documentation and Accreditation Council’s expert opinion, ASHE determines whether necessary requirements for performing scientific activities were met and forwards an Accreditation Recommendation for performing scientific activities to MSE.

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11. Required documentation includes: 1. a study on the study programme, which includes a feasibility study concerning the implementation of the study programme, pursuant to the Network of Higher Education Institutions and Study Programmes, and which was developed in cooperation with higher education teachers teaching in the field of the study programme for which the application is being submitted; 2. proof that the applicant possesses adequate facilities and equipment; 3. appropriate number of employment contracts signed with the scientific and teaching staff; 4. proof that the applicant has secured funds needed to carry out the activities.

12. Required documentation includes: 1. a constituting document; 2. a study on performing scientific activities, which includes a multi-year strategic plan for research in the field of science that is the subject of the application; in case of the founding of a public scientific organization, a feasibility study on founding an organization pursuant to the Public Scientific Institutions Network is also required; 3. proof that the applicant possesses suitable facilities and equipment; 4. proof that the applicant has secured the required number of scientists that were appointed to the appropriate scientific grade or have published the required number of scientific papers; 5. proof that the applicant has secured sufficient funds for the organization to operate.
Based on the recommendation, MSE may:

- Grant approval to the applicant to establish the higher education institution; or
- Deny approval to the applicant to establish the higher education institution.

The transparency of initial accreditation documents

The following documents result from all three initial accreditation procedures:

- An application for a licence
- A collection of accompanying documents (which differ based on the type of initial accreditation)
- Accreditation Council's expert opinion
- ASHE’s Accreditation Recommendation
- The Minister’s final decision on the issuing or withholding of a licence.

Of the listed documents, currently only ASHE’s accreditation recommendations are publicly available (on ASHE’s website), but the authors of this guide believe there is no reason not to make other documents publicly available as well.\(^\text{13}\) This particularly concerns the Minister’s final decision on the issuing or withholding of a licence, due to the fact that activities in the field of higher education and science are of public interest and for the most part publicly funded. We also recommend publishing an annual initial accreditation report that would contain a list of institutions and study programmes that were issued a licence, as well as those that were denied a licence, with accompanying explanations.

B. Re-accreditation in higher education

Re-accreditation is an external quality assurance procedure that existing higher education institutions and/or science organizations undergo. It is a mechanism of verifying the competences and credibility of a higher education institution’s qualifications and it systematically measures and verifies higher education institutions’ compliance with higher education standards. The goal of re-accreditation is the protection and enhancement of the quality of higher education.

All public and private higher education institutions, public science institutes and other scientific organizations that were founded by the Republic of Croatia, private scientific organizations and other legal persons\(^\text{14}\) that receive public funding are subject to periodic re-accreditation every five years. Re-accreditation is carried out in accordance with the Procedure for Re-accreditation of Higher Education Institutions pursuant to the annual plan adopted by ASHE, but it may also be carried out at the request of the minister or higher education institution.

The process of re-accreditation verifies whether the institution undergoing the procedure meets the necessary requirements stipulated by the Ordinance on the Content of Licences and Conditions for Issuing Licences for Performing Higher Education Activities, Implementing Study Programmes and Re-accreditation of Higher Education Institutions. In addition, pursuant to the Criteria for the Assessment of Quality of Higher Education Institutions Within Universities and the Criteria for the Assessment of Quality of Universities of Applied Sciences and University Colleges of Applied Sciences, an assessment of quality is given alongside recommendations on improving the higher education institution’s quality.

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\(^{13}\) With the exception of those documents the publishing of which would violate the provisions of the Personal Information Protection Act (OG 103/03, 118/06, 41/08, 130/11).

\(^{14}\) Private scientific organizations and other legal persons that are publicly funded are subject to periodic re-accreditation only in that segment which is publicly financed.
The re-accreditation of higher education institutions consists of the following stages:

- The higher education institution drafts a self-evaluation report in accordance with the Guidelines for Drafting Self-Evaluation Reports for Higher Education Institutions Within Universities or the Guidelines for Drafting Self-Evaluation Reports for Universities of Applied Sciences and University Colleges of Applied Sciences.
- The expert committee visits the higher education institution.
- The expert committee drafts a final report.
- The Accreditation Council gives its decision.
- ASHE issues the Accreditation Recommendation.
- The Minister issues a decision based on the Accreditation Recommendation.
- Follow-up monitoring.

There are three potential outcomes of the re-accreditation procedure, that is, three potential decisions of the Minister:

- Confirmation of meeting requirements for performing the activities or part of the activities (licence extension)
- Withholding of the licence for performing the activities or part of the activities
- The issuing of a letter of expectation with a three-year deadline for correcting identified deficiencies.

The transparency of re-accreditation documents

The following documents result from the re-accreditation procedure:

- The self-evaluation report of the higher education institution undergoing the procedure (the document through which the higher education institution carries out a self-evaluation based on predefined criteria)
- The expert committee’s final report
- The Accreditation Council’s opinion
- The higher education institution’s objection/response to the expert committee’s report
- ASHE’s Accreditation Recommendation
- The Minister’s decision.

Of the listed documents, currently only the expert committees’ final reports, higher education institutions’ responses to the final reports, and ASHE’s accreditation recommendations are always made publicly available (on ASHE’s website). Higher education institutions’ self-evaluation reports are occasionally made available on the websites of individual higher education institutions that underwent re-accreditation and published their reports voluntarily (which we welcome as an example of good practice). Although the authors of this guide believe there is no reason why other re-accreditation documents should not be published as well, it is particularly important to emphasize that the Minister’s decisions as to whether to grant (conditional or unconditional) licence extensions or deny licences to higher education institutions should be publicly available on the websites of both ASHE and higher education institutions. Specifically, according to the Act on Quality Assurance in Science and Public Education, the Minister is not legally obligated to follow ASHE’s Accreditation Recommendation. Due to the fact that the Minister’s decisions on re-accreditation of individual higher education institutions are not publicly available, it is not clear whether the Minister acts in accordance with the Accreditation Recommendation when they extend or withhold an

15 If the higher education institution undergoing re-accreditation submits one.
institution’s licence, or whether they do so in opposition to the recommendation and for what reason. Since the Minister can make discretionary decisions regarding the final outcome of the re-accreditation procedure and is not obligated to follow ASHE’s Accreditation Recommendation, we suggest that all final decisions of the Minister regarding re-accreditation, alongside accompanying explanations, be made publicly available on the websites of M5E, ASHE and higher education institutions that underwent re-accreditation. We also recommend publishing an annual re-accreditation report that would contain a list of institutions and study programmes that were issued a licence, as well as those that were denied a licence, with accompanying explanations.

C. Thematic evaluation

Thematic evaluation is the process of assessing the quality of one segment of the science and higher education system and is conducted at the request of the Minister, a scientific organization, a higher education institution, Student Council or ASHE. The methodology of thematic evaluations is determined specifically for each request depending on the subject and in accordance with European and international good practice.

The result of the thematic evaluation is the Final Report of the Expert Committee which includes an assessment of compliance with the subject of the evaluation. In case of a negative assessment, ASHE may launch a re-accreditation procedure by official duty or at the Minister’s suggestion.

The transparency of thematic evaluation documents

Taking into account the fact that the methodology of each thematic evaluation is determined specifically for each separate request, there is no universal list of documents that are produced in this procedure. The only document that is always produced is the Final Report of the Expert Committee. So far, all such final reports of thematic evaluations have been published on ASHE’s website, which we welcome as an example of good practice.

D. Periodic independent external audit of internal quality assurance systems (audit)

The independent external audit of internal quality assurance systems is the process of assessing the degree of development and efficiency of higher education institutions’ internal quality assurance systems. It is a systematic periodic procedure that ascertains whether the activities and results of activities that make up the higher education institutions’ quality assurance systems are efficient and compliant with the national standards and the ESG. The external audit also assess the contribution to the continuous enhancement of the quality culture and the culture of education of a higher education institution, determines how much the institution strives towards realizing the mission and strategic goals of its quality assurance body and compares the quality standards reached by the institution with the quality and standards at similar higher education institutions in Croatia and EHEA countries.

The procedure is carried out in accordance with the Guide for Periodic Independent External Audits of Quality Assurance Systems of Higher Education Institutions in Croatia. At the end of it, ASHE issues a Conclusion which establishes the degree of the development and efficiency of the institution’s quality assurance system and its compliance with the ESG, and contains recommendations for improving the system. According to the Guide, the audit assesses whether the individual segments of internal quality assurance systems have reached one of the following stages of development: 1. preliminary stage; 2. initial stage; 3. developed stage; 4. advanced stage. A higher education institution’s quality assurance system may receive the ASHE certificate if one of the seven standards stipulated in Part 1 of the ESG has reached at least the initial stage while all others have reached at least the developed stage, under the conditions that the ESG’s 1.1 standard (Policy and Procedures
for Quality Assurance) and the 1.2 standard (Approval, Monitoring and Periodic Review of Programmes and Awards) have reached at least the developed stage.

The transparency of the documents produced in the periodic independent external audit of internal quality assurance systems

The following documents are produced in an audit:

- Final report with recommendations
- Higher education institution’s response to the final report
- Conclusion
- Certificate of the quality assurance system’s level of development and efficiency.

All final reports, responses and conclusions are available on ASHE’s website alongside a list of higher education institutions that received quality assurance certification, which we welcome as an example of good practice.

(Table 1.) An overview of the external quality assurance procedures

<table>
<thead>
<tr>
<th>EVALUATION SUBJECTS</th>
<th>INITIAL ACCREDITATION</th>
<th>RE-ACCREDTATION</th>
<th>THEMATIC EVALUATION</th>
<th>PERIODIC INDEPENDENT EXTERNAL AUDIT OF QUALITY ASSURANCE SYSTEMS OF HIGHER EDUCATION INSTITUTIONS</th>
</tr>
</thead>
</table>
| - newly founded higher education institutions;  
- new study programmes;  
- launching of scientific activities | - existing higher education institutions | a particular subject or theme in science and higher education | - existing higher education institutions  
- existing scientific organizations |
<p>| FREQUENCY | once (during the foundation / launching) | every 5 years | on demand | every 5 years |
| PURPOSE | meeting necessary requirements | assessment of compliance with necessary requirements and quality standards | depending on the theme - evaluation, assessment and/or development of the subject of evaluation | overview of efficiency and degree of development of the internal quality assurance system |</p>
<table>
<thead>
<tr>
<th>ELEMENTS OF THE PROCEDURE</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>self-evaluation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>independent committee that includes foreign experts</td>
<td>✓ / -</td>
<td>✓</td>
<td>✓ / -</td>
<td>✓</td>
</tr>
<tr>
<td>visit from the committee</td>
<td>✓</td>
<td>✓</td>
<td>✓ / -</td>
<td>✓</td>
</tr>
<tr>
<td>publishing of a report</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>follow-up activities</td>
<td>-</td>
<td>✓</td>
<td>✓ / -</td>
<td>✓</td>
</tr>
<tr>
<td>OUTCOME</td>
<td>issuing of a licence: YES/NO</td>
<td>issuing of a licence: YES/NO/LETTER OF EXPECTATION</td>
<td>REPORT CONTAINING AN ASSESSMENT</td>
<td>CERTIFICATE</td>
</tr>
</tbody>
</table>

Source: www.azvo.hr

(Table 2.) Overview of documents based on external evaluation procedures

<table>
<thead>
<tr>
<th>DOCUMENTS PRODUCED</th>
<th>PUBLICLY AVAILABLE DOCUMENTS</th>
<th>WEBSITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Application for a licence</td>
<td>3. ASHE’s Accreditation Recommendation</td>
<td>Initial accreditation of higher education institutions: <a href="https://www.azvo.hr/en/evaluations/evaluations-in-higher-education/initial-accreditation-of-higher-education-institutions">https://www.azvo.hr/en/evaluations/evaluations-in-higher-education/initial-accreditation-of-higher-education-institutions</a></td>
</tr>
<tr>
<td>2. Collection of accompanying documentation submitted alongside the application</td>
<td></td>
<td>Initial accreditation of study programmes: <a href="https://www.azvo.hr/en/evaluations/evaluations-in-higher-education/initial-accreditation-of-study-programmes">https://www.azvo.hr/en/evaluations/evaluations-in-higher-education/initial-accreditation-of-study-programmes</a></td>
</tr>
<tr>
<td>3. ASHE’s Accreditation Recommendation</td>
<td></td>
<td>Initial accreditation of scientific organizations: <a href="https://www.azvo.hr/en/evaluations/evaluations-in-science/initial-accreditation-of-scientific-organisations">https://www.azvo.hr/en/evaluations/evaluations-in-science/initial-accreditation-of-scientific-organisations</a></td>
</tr>
<tr>
<td>4. The Minister’s decision to issue or withhold a licence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## RE-ACCREDITATION

<table>
<thead>
<tr>
<th>DOCUMENTS PRODUCED</th>
<th>PUBLICLY AVAILABLE DOCUMENTS</th>
<th>WEBSITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-evaluation report of the higher education institution</td>
<td>1. Self-evaluation report of the higher education institution</td>
<td>Initial accreditation of higher education institutions:</td>
</tr>
<tr>
<td>3. Higher education institution’s objection/response to the expert committee’s report</td>
<td>3. Higher education institution’s objection/response to the expert committee’s report</td>
<td>Initial accreditation of study programmes:</td>
</tr>
<tr>
<td>5. The Minister’s decision to issue or withhold a licence</td>
<td></td>
<td>Initial accreditation of scientific organizations:</td>
</tr>
</tbody>
</table>

## THEMATIC EVALUATION

*Since the methodology of each thematic evaluation is determined specifically for each request, there is no universal list of documents that are produced during this procedure. The only document that is always produced is the Final Report of the Expert Committee. So far, all final reports of thematic evaluations have been published on ASHE’s website (https://www.azvo.hr/en/evaluations/evaluations-in-higher-education/thematic-evaluation-in-higher-education; https://www.azvo.hr/en/evaluations/evaluations-in-science/thematic-evaluation-in-science).*

## PERIODIC INDEPENDENT EXTERNAL AUDIT OF THE QUALITY ASSURANCE SYSTEMS OF HIGHER EDUCATION INSTITUTIONS

<table>
<thead>
<tr>
<th>DOCUMENTS PRODUCED</th>
<th>PUBLICLY AVAILABLE DOCUMENTS</th>
<th>WEBSITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Final report with recommendations</td>
<td>1. Final report with recommendations</td>
<td>Periodic independent external audit of the quality assurance systems of higher education institutions:</td>
</tr>
<tr>
<td>3. Conclusion containing an assessment of the degree of development and efficiency of the quality assurance system</td>
<td>3. Conclusion containing an assessment of the degree of development and efficiency of the quality assurance system</td>
<td></td>
</tr>
</tbody>
</table>

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16, If the higher education institution undergoing re-accreditation submits one.

17, Self-evaluation reports are occasionally available at the websites of individual higher education institutions that underwent the re-accreditation procedure and published them voluntarily. ASHE does not publish self-evaluation reports on its website.

18, If the higher education institution undergoing re-accreditation submits one.
1.3. Methodology of monitoring the transparency of quality assurance in higher education

In this part of the guide, we will lay out the basic principles of the method we will use to analyse the three elements related to quality assurance in higher education:

1. the transparency of the procedures of the external quality assurance and enhancement system
2. the transparency of the procedures of the internal quality assurance and enhancement system at higher education institutions
3. competent institutions’ data on the quality of higher education institutions.

For the purposes of this project, we define transparency as the availability, accessibility and intelligibility of data on the quality of higher education, i.e., documents resulting from the external or internal quality assurance procedures and processes. We consider data/documents to be transparent primarily if they are available on higher education institutions’ websites. Although some of the documents produced in the course of external quality assurance procedures are publicly available on the Agency for Science and Higher Education’s website, the authors of this guide believe it is of crucial importance that these documents are also published on the websites of higher education institutions themselves. The transparency of quality assurance procedures implies that interested citizens can quickly and simply access aforementioned information without being familiar with the quality assurance system and the national bodies and institutions involved in implementing it. The first place where interested individuals will look for information on the quality of a higher education institution is the website of the institution itself. The authors of this guide believe that higher education institutions’ websites should contain all information, regardless of whether that information has already been published on ASHE’s website.

Based on this guide, the QUALITYWATCH project will produce three local reports for three counties included in the project. However, the described methodology is applicable in the analysis of the quality assurance system of any higher education institution in the Republic of Croatia.

(A) the transparency of select external quality assurance procedures: the re-accreditations and audits of higher education institutions at universities and their constituent units, universities of applied sciences and university colleges of applied sciences
(B) the transparency of internal quality assurance systems at all higher education institutions
(C) data on the quality of higher education institutions resulting from re-accreditations and audits carried out at higher education institutions by the competent body, i.e., the Agency for Science and Higher Education.

The units of analysis in the reports on the transparency of quality assurance in higher education are higher education institutions. Data on quality assurance processes is collected at the level of higher education institutions, presented combined and interpreted separately for universities on the one hand and universities of applied sciences and university colleges of applied sciences on the other (whenever possible, considering the number of higher education institutions of a particular type). It is important to note that, apart from higher education institutions, certain university departments and study programmes that do not have legal
personhood are also units subject to ASHE’s evaluations. In this project and in the county reports resulting from this guide, all such organizational units are treated in the analysis as higher education institutions. Partners that authored county reports have established whether the universities they are analysing contained such units and subjected those units to the same analyses as higher education institutions. Group presentation of the results for universities included data on these organizational units alongside data on other higher education institutions.

1.3.1. Analysis structure and indicators

The analysis will focus on internal quality assurance processes carried out by higher education institutions and on certain external quality assurance processes. External quality assurance consists of several different types of evaluations, not all of which were carried out at all higher education institutions. As was explained in the previous sections of this guide, not all types of evaluations are necessarily carried out at all higher education institutions. For the purposes of the QUALITYWATCH project, only documents and processes that are part of the re-accreditation of higher education institutions and the periodic independent external audit of internal quality assurance systems will be analysed; other types of external quality assurance procedures will not be analysed.

In deciding which indicators and criteria will be used to measure the level of transparency and development of quality assurance in higher education, we were guided primarily by the Act on Quality Assurance which regulates the external quality assurance and enhancement procedures and documents resulting from them. Another key document that we consulted were the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). Although the ESG is not a binding document, the standards and guidelines it proposes represent the basis on which the Croatian quality assurance system was also built. Besides, we believe that ESG’s recommendations, particularly those that concern transparency and public information, can only improve the existing quality assurance systems.

Apart from the transparency of internal and external quality assurance systems, one part of the analysis will also be dedicated to analysing data resulting from ASHE’s accreditation recommendations and final audit reports, which will offer a more straightforward and legible insight into the official assessment of quality of higher education institutions. As a result, the analysis and corresponding county reports will consist of three parts.

1.3.2. The transparency of external quality assurance and enhancement procedures

The first part of the analysis concerns the transparency of external quality assurance and enhancement procedures. The indicators described below will be used to calculate the transparency index of quality assurance of every individual higher education institution, the average transparency index of each university (using the indexes of every constituent unit of the university) and the average transparency index of all universities of applied sciences and university colleges of applied sciences included in the analysis in a specific county (using the index of each university of applied sciences/university college).

We will consider the availability of documents produced in audits and re-accreditations as indicators of transparency. For full transparency to exist, it is important that higher education institutions make all relevant documents that concern them available on their own websites. As was pointed out earlier in this guide, some of these documents are regularly published on ASHE’s website and are publicly available for all higher education institutions. Since it is important for full transparency that higher education institutions publish the results of external evaluations on their official websites or link to those results, we will consider this to be an indicator of transparency. Since our definition of transparency also refers to the “intelligibility” of documents, we will consider the publishing of documents, news or infographics through which the higher education institution...
concisely and clearly shows the results of external quality assurance procedures to be another indicator of transparency. It has been shown that intelligibility is difficult to make operational and measure, so this indicator should indicate whether higher education institutions are trying to make existing documents more intelligible and clear to the target groups they’re intended for. We will analyse the publishing of documents that contain accreditation results and documents that contain audit results (for higher education institutions that have undergone this process) as separate indicators.

In accordance with that, the public availability of the following nine documents will be analysed:

1. Higher education institution’s self-evaluation report (re-accreditation)
2. Expert committee’s final report (re-accreditation)
3. Ashe’s accreditation recommendation (re-accreditation)
4. Minister’s decision on issuing a licence for performing activities (re-accreditation)
5. Concise and clear overview of re-accreditation results
6. Final report with recommendations (audit)
7. Higher education institution’s response to the final report (audit)
8. Ashe’s conclusion with an assessment of the degree of development and efficiency of the quality assurance system (audit)
9. Concise and clear overview of audit results.

In case a higher education institution has not made the above documents available publicly, via a questionnaire that will be sent to all higher education institutions (see Appendix II.), we will find out if said institution intends to make the documents publicly available in the current academic year. Based on their responses and collected data, we will assign points based on the availability of each document listed above in the following manner:

| The document or link to the document is easily accessible from the higher education institution’s website | 5 points |
| The document or link to the document is moderately accessible from the higher education institution’s website | 4 points |
| The document or link to the document is accessible, but cannot easily be found on the higher education institution’s website | 3 points |
| The higher education institution plans to make the document available publicly on its website in the current academic year | 2 points |
| The higher education institution has not made the document publicly available on its website nor does it intend to make it publicly available in the current academic year | 1 point |

The transparency index of a higher education institution shall be determined by dividing the total number of points the institution is assigned based on all these indicators with the number of indicators. In case the higher education institution has not undergone an audit, only the documents produced in the re-accreditation procedure will be analysed and the institution will be rated based on five indicators. If the higher education institution has undergone an audit, it will be rated based on nine indicators. In either case, the transparency index will be a value between one and five.

19. As a separate audit document, ASHE’s Conclusion has only existed since 2012. For higher education institutions that underwent an audit before May 2012 the number of indicators applicable is eight, while for all others the number of indicators is nine.

20. The final score of whether the document or link is easy, moderate or difficult to access has been calculated as the average score of two independent assessors who offered their estimates of ease of access to documents. The intention to publish documents was scored only for those higher education institutions which: a) filled out the questionnaire and b) expressed intention to publish the documents.
Since the universities in the three observed counties are not integrated - instead their constituent units have a separate legal status - the university as a whole does not undergo the re-accreditation procedure, its constituent units do. However, since all universities in the observed counties underwent an audit, a separate transparency index was calculated for them based only on the availability of documents resulting from that type of evaluation, i.e., based on the four indicators that concern documents produced in an audit.21

When compiling county reports as part of the QUALITYWATCH project, the transparency index will be calculated in the above-described manner for each higher education institution in the three chosen counties (university constituents, universities of applied sciences, university colleges). Based on these transparency indexes, it is possible to calculate average transparency indexes for a specific type of higher education institution. Specifically, it is possible to group the indexes of each higher education institution of a specific type and calculate the average transparency index for each of the three universities (mean of all constituents) as well as the average of all universities of applied sciences and university colleges, following the same principle. While conducting the analysis, particular attention will be paid to how frequently individual documents are made available. If the analysis shows that any of the nine aforementioned documents stands out, it will be specifically emphasized in the narrative part of the reports.

1.3.3. The transparency of internal quality assurance and enhancement procedures

The second part of the analysis concerns the transparency of internal quality assurance and enhancement procedures. As there is no prescribed common approach to structuring internal quality assurance systems to which higher education institutions must adhere, it is difficult to construct a transparency index due to the differences and specifics of individual systems at different higher education institutions. Therefore, instead of calculating an index, we have descriptively analysed three transparency indicators of internal quality assurance systems for higher education institutions included in the analysis.

The following indicators will be examined:

1. Public information about whether the higher education institution has a body in charge of internal quality assurance:
   (√) for example, a quality assurance committee or office, or other offices and bodies authorized to carry out quality assurance activities.

2. Public availability of key documents which establish the internal quality assurance system of an individual higher education institution and regulate the implementation of internal quality assurance procedures:
   (√) for example, quality assurance strategy, quality assurance policy, quality assurance operating plan, quality assurance ordinance, quality assurance guide and similar.

3. Public availability of the results and/or analyses of student surveys carried out by the higher education institution:
   (√) reports on any type of student surveys carried out in the past five academic years (2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016) with an overview and/or cluster analysis of survey results.

21 This index will not be included in the calculations of the average university index, it will be analyzed separately.
Higher education institutions were sent a questionnaire (see Appendix II.) through which it was possible to determine whether these institutions have the above mentioned quality assurance bodies and documents; which bodies and documents those are; and whether they’re published on the institutions’ websites. In case strategic and operating documents were not available online, the questionnaire provided the information as to whether these bodies and documents exist and, if they do, whether the institutions intend to make them available on their websites in the current academic year. Regarding student survey results, via the questionnaire the researchers determined whether survey results and/or analyses of survey results were publicly available. For those higher education institutions that did not fill out the questionnaire, the researchers did desk research to see if the requested information is available on the institutions’ websites.

Based on the desk research and responses received, the researchers analysed the degree of transparency of internal quality assurance systems. Furthermore, they established which bodies and documents are most common, whether they are available on higher education institutions’ websites and whether there are plans to make them publicly available. Particular attention was given to whether student survey results/analyses were published. The publishing of student survey results is an extremely sensitive issue. While the importance of protecting private information can be debated, we believe that it is of extreme importance that at least some type of analyses of student survey results are published. The format of student surveys may differ between different higher education institutions. Some surveys are focused only on the quality of study programmes and teaching, while others also include questions about administrative support to students and the operations of the higher education institution as an institution. For the purpose of this research, all institution-wide surveys carried out by higher education institutions were taken into account regardless of their content. We believe it is important to promote the transparency of data obtained through student surveys in order to give greater importance to students’ opinions and to establish a basis for the critique and improvement of student evaluations.

1.3.4. Analysis of the official assessments of higher education institutions’ quality

The third part presents an analysis of the official assessments of higher education institutions’ quality in the three selected counties in order to present these assessment in a more straightforward and intelligible way. ASHE’s accreditation recommendations (produced during re-accreditations of higher education institutions) contain assessments of higher education institutions’ quality with regard to seven areas/standards. Therefore these seven categories will form the basis for establishing the level of higher education institutions’ quality, that is, they will serve as the first quality indicator.

The seven areas or quality standards include:

(1) Managing Higher Education Institutions and Quality Assurance
(2) Study Programmes
(3) Students
(4) Teachers
(5) Research\(^{22}\) and Professional Activities
(6) Mobility and International Cooperation
(7) Resources.

\(^{22}\) For universities and their constituent units this standard refers to “scientific and professional activities” while for universities of applied sciences and university colleges of applied sciences, unless they are registered in the Register of Scientific Organizations, this standard refers to “professional and research activities.” For the purpose of analysis, in this research these categories are considered to be equivalent.
Each of these standards is assessed based on the following rating scale: 1) Not Implemented; 2) In the Initial Stage of Implementation; 3) Partially Implemented; 4) Mostly Implemented; 5) Fully Implemented. Based on these ratings, it is possible to calculate the average quality rating of individual higher education institutions that underwent re-accreditation and the average ratings of individual quality standards. Here it is important to point out that these ratings are primarily descriptive and qualitative in nature. The rating methodology is such that an individual rating includes a number of descriptive aspects; therefore, it does not express a particular standard’s univocal state. Thus, the numerical values accompanying the descriptions cannot be treated as quantitative criteria based on which higher education institutions can be ranked. However, assessments expressed in this form can serve to draw a comparison between the degrees of development of individual standards, without a strict ranking of the institutions.

During analysis, each rating was accompanied by a numerical value ranging from 1 to 5. The researchers calculated the average quality ratings (ranging from “Not Implemented” to “Fully Implemented”) for each of the seven quality standards for all universities and/or their constituent units as well as for universities of applied sciences and university colleges of applied sciences, and presented these ratings in graph form. This shows which quality standards are the most developed and which ones should be given more attention. Graphs and narrative analyses separately present the results for universities and/or their constituent units on the one hand and for universities of applied sciences and university colleges of applied sciences on the other. In addition, the ratings of quality standards of each higher education institution included in the analysis are also be presented in table form.

Apart from the average ratings of individual quality standards, the frequency of certain ratings is also shown in graph form and the average ratings of the quality of private and public higher education institutions is compared where possible.

ASHE’s final Accreditation Recommendation for issuing a licence for performing activities was used as the second quality indicator. Researchers established and graphically presented the number of higher education institutions that received ASHE’s recommendation for a licence, those that were denied a licence and those that were given a letter of expectation and a deadline by which they must correct identified deficiencies. Graphical overview and narrative analyses separately present results for universities and/or their constituent units on the one hand, and universities of applied sciences and university colleges of applied sciences on the other. The comparison between private and public higher education institutions was conducted where possible.

The official assessments of the degree of development and efficiency of internal quality assurance systems, produced as a result of periodic independent external audits of quality assurance systems, was used as the third quality indicator. Since not all higher education institutions have undergone this procedure, this part of the analysis will concern only the institutions that underwent an audit (administered by ASHE). An audit is carried out based on the following ESG criteria/standards:

- Policy and Procedures for Quality Assurance
- Approval, Monitoring and Periodic Review of Programmes and Awards
- Research
- Student Assessment
- Quality Assurance of Teaching Staff
- Learning Resources and Student Support
- Information Systems
- Public Information.

23. Although the licence is formally issued as a result of the Minister’s decision, the Accreditation Recommendation is instead used as an indicator for two reasons. The first reason is that, unlike the Minister’s decisions, accreditation recommendations are publicly available for all higher education institutions and therefore allow consistent analysis. The other reason is the fact that the recommendations are based on the work of the expert committee and the Accreditation Council, therefore they represent a relevant expert assessment of the quality of higher education institutions.
Each of these criteria is assigned one of four ratings signifying their degree of development based on whether the higher education institution is in the 1) Preliminary Stage, 2) Initial Stage, 3) Developed Stage or 4) advanced Stage with regard to each criteria. In addition, it is possible that some criteria will be assessed as being between two stages. The categorization of quality assurance systems at higher education institutions according to the degree of their development is determined based on the assessment of these criteria and is also divided into four stages/levels:

**Level 1: - PRELIMINARY STAGE** - The quality assurance system is being prepared (documentation is being drawn up, agreements have been reached institution-wide).

**Level 2: - INITIAL STAGE** - The quality assurance system has been established, but it is not operational (basic documents of the system have been drawn up).

**Level 3: - DEVELOPED STAGE** - The quality assurance system is operational, an internal audit has been carried out and the system is being improved based on the results of the internal audit.

**Level 4: - ADVANCED STAGE** - The quality assurance system is continuously improved based on the results of internal and external audits.

The authors of county reports listed, for each county report, which higher education institutions included in the analysis underwent an audit and what percentage of overall institutions they account for. During the analysis, each of these stages was rated with a numerical value of 1 to 4, thus calculating the average rating of the degree of development of quality assurance systems at higher education institutions as well as the average ratings of individual ESG standards. A graphical representation and narrative analysis of data was produced separately for universities and/or their constituent units on the one hand and the universities of applied sciences and university colleges of applied sciences on the other. A comparison between private and public higher education institutions was conducted where possible.

### 1.3.5. Interpretation and narrative description of results

After collecting and analysing data and producing basic graphical representations described in the previous chapter, the authors of county reports provided a narrative description of the results and, based on the findings, offered a description of the state of transparency of quality assurance at higher education institutions in their respective counties. When interpreting the results, particular attention was given to perceived flaws in internal and external quality assurance systems, both when it comes to the transparency of data and when it comes to the degree of development of the system itself and the quality of higher education institutions. Although the analyses apply to higher education institutions in the three counties included in this project, due to the centralized structure of the national external quality assurance system, many insights will also be applicable in the wider national context. At the same time, local particularities, especially when listing opportunities for improvement, may serve as inspiration for improving internal quality assurance systems at higher education institutions that were not included in this project.

The authors were critical while analysing data, writing interpretations and presenting their ideas for improving quality assurance in higher education, both at individual higher education institutions and nation-wide. All the recommendations were given in good faith and in a constructive manner.

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2. Report on the Transparency of Quality Assurance at Higher Education Institutions in the City of Zagreb

RIA BILIĆ, MATIJA SINKOVIĆ
2. Report on the Transparency of Quality Assurance at Higher Education Institutions in the City of Zagreb

Ria Bilić, Matija Sinković

2.1. Introduction and basic methodological remarks

This report includes all higher education institutions in the City of Zagreb. The objective of this and other reports contained in this publication is to provide a general picture of the transparency of quality assurance procedures in higher education and of the level of quality of higher education institutions in selected counties. Indirectly, we would like this report and the entire QUALITYWATCH project to emphasize the importance of quality assurance in higher education and encourage higher education institutions to publish quality assurance information as transparently and systematically as possible.

At the time of writing this report, there were fifty-four higher education institutions operating in the City of Zagreb: three universities, thirty faculties, three academies, one university department, three universities of applied sciences and fourteen university colleges of applied sciences. In addition to these institutions, Zagreb also had one university college of applied sciences that no longer exists as an independent institution but is included in some of the analyses in this report. Of these higher education institutions, thirty-eight are public, and sixteen are private. The University of Zagreb is the only public university, while the two other existing universities are private: Libertas International University and the Croatian Catholic University. All university
constituent units are public higher education institutions since they are all part of the University of Zagreb. The two private universities were established as integrated universities, and thus do not consist of constituent units as separate legal entities that go through the re-accreditation and audit procedures separately.

The majority of universities of applied sciences and university colleges of applied sciences that implement exclusively professional study programmes are private. Two universities of applied sciences (the Polytechnic of Zagreb and University of Applied Health Sciences) as well as one university college of applied sciences (Zagreb Police College) are public higher education institutions, whilst one university of applied sciences and the remaining twelve university colleges of applied sciences are privately owned. Nevertheless, more students attend public universities of applied sciences and public university colleges of applied sciences (7,471 students) than private ones (4,943 students). The largest and most important higher education institution in the City of Zagreb is the University of Zagreb with its thirty-three constituent units and more than 70,000 students. Among the University’s constituent units, the two largest by the number of students are the Faculty of Economics and Business with more than 10,000 students, and the Faculty of Law with more than 8,900 students.

The methodology of this report has been explained in detail in the Guide to Monitoring the Transparency of Quality Assurance in Higher Education, which is an integral part of this publication. Additionally, the data on the exact number of higher education institutions included in individual parts of the analysis are listed at the beginning of each subchapter in this report, alongside the specific methods used in the analysis of particular parts. The number of higher education institutions included in individual parts of the analysis varies due to the fact that not all higher education institutions have been through all quality assurance procedures that are being analyzed. Additionally, Libertas Business School has been excluded from the analysis despite having undergone the re-accreditation procedure. This is due to the fact that the school has since become a constituent unit of the Libertas International University which was established in the meantime. To avoid the duplication of data for the same institution, only the documents available for the Libertas International University were analysed.

Quality assurance data were collected using an online questionnaire sent to higher education institutions and by examining the websites of higher education institutions and the Agency for Science and Higher Education (ASHE). In the analysis, we made use of all publicly available documents produced in the re-accreditation and audit procedures, and the higher education institutions’ documents concerning quality assurance. Although in certain sections of the report we also analyse the assessments of quality of higher education institutions based on ASHE’s accreditation recommendations, the focus of the report is on the transparency of data, not their content.

The research undertaken to gather the data was conducted in January and February 2016 with the help of an online questionnaire created using Google Forms tool, and it was carried out by researchers from the Institute for the Development of Education. The first step was drawing up an extensive list of all higher education institutions (universities, university’s constituent units, universities of applied sciences and university colleges of applied sciences) in the City of Zagreb which contained contact information of key persons in charge of quality assurance and of the deans and vice-deans of all higher education institutions. These persons were sent an invitation to take part in the research; the invitation included information about the project, an explanation of the research and the link to the questionnaire. In addition, the invitation requested specifically that only persons familiar with or in charge of quality assurance reply to the questionnaire. The higher education institutions that did not fill in the questionnaire were sent a reminder by e-mail after two weeks, and those who did not fill in the questionnaire even after the reminder were contacted by phone and reminded again.

25, Source: www.dzs.hr
26, Source: https://www.azvo.hr/hr/visoko-obrazovanje/statistike/44-statistike/689-broj-studenata-na-visokim-uilitima-za-0910-i-1011-godinu
27, Herein referred to as the Guide.
28, Heads of quality assurance offices, heads/chairmen of quality assurance committees, presidents of quality assurance commissions and similar.
Using the questionnaire, data was collected for twenty-nine out of fifty-four higher education institutions (54%), whereas for the remaining twenty-five higher education institutions the researchers later collected data by searching their official websites. The research was conducted on a sample of fifty-four institutions of higher education: three universities (one public and two private universities), thirty-five university constituent units, three universities of applied sciences, and thirteen university colleges of applied sciences. Out of fifty-four higher education institutions, thirty-eight are state-owned, while sixteen are private.  

(Figure 1.) Sample structure by type of higher education institution

(Figure 2.) Sample structure by ownership of higher education institution

29. The University of Zagreb: Faculty of Agriculture, Faculty of Architecture, Academy of Dramatic Arts, Academy of Fine Arts, Faculty of Education and Rehabilitation Sciences, Faculty of Economics and Business, Faculty of Electrical Engineering and Computing, Faculty of Organization and Informatics, Faculty of Chemical Engineering and Technology, Faculty of Political Science, Faculty of Transport and Traffic Sciences, Faculty of Mechanical Engineering and Naval Architecture, Faculty of Pharmacy and Biochemistry, Faculty of Humanities and Social Science, Faculty of Philosophy of the Society of Jesus (constituent unit of the University Centre for Croatian Studies), Faculty of Geodesy, Faculty of Geotechnical Engineering, Faculty of Civil Engineering, Faculty of Graphic Arts, University Centre for Croatian Studies, Catholic Faculty of Theology of the University in Zagreb, Faculty of Kinesiology of the University in Zagreb, School of Medicine, Faculty of Metallurgy, Academy of Music, Faculty of Law, Faculty of Science, Faculty of Food Technology and Biotechnology, Faculty of Mining, Geology and Petroleum Engineering, School of Dental Medicine, Faculty of Forestry, Faculty of Textile Technology, Faculty of Teacher Education, Faculty of Veterinary Medicine, Theological Faculty Matija Vlačić Ilrik; Libertas International University, Croatian Catholic University; Polytechnic of Zagreb, University of Applied Health Sciences, VERN’ University of Applied Sciences; Edward Bernays College of Communication Management, European Business School Zagreb, Zagreb Police College, RRIF College for Financial Management, Zagreb School of Business, Dag Hammarskjöld University College of International Relations and Diplomacy, Agora University College, University College of Economics, Entrepreneurship and Management Nikolaj Šubić Zrinski, College for Information Technologies, Algebra University College, College of Occupational Safety and Health, Efectus University College for Finance and Law, Zagreb School of Economics and Management.

30. For more information on the relationship between the university and university constituent units in this analysis, see chapter 1.3. in the Guide.

31. Matija Vlačić Ilrik is an accredited private university college which, according to the special agreement with the University of Zagreb, implements exclusively university-level study programmes and operates on the University’s premises, although formally it is not a constituent unit of the University. Because of its ambiguous legal status, for the sake of this analysis this higher education institution is treated as a university constituent unit, but privately owned.
The analysis of quality assurance data is divided into three parts. The analysis of the transparency of external quality assurance procedures is presented in the first part. In order to present the information on transparency as legibly as possible, we have created the **transparency index of quality assurance systems**, which is based on the public availability of re-accreditation and audit documents on the websites of higher education institutions). As was pointed out earlier in the Guide, some of these documents are systematically published on ASHE’s website and are publicly available for all higher education institutions. However, we believe that any interested party (student, pupil, parent etc.) **must be able to find information about the quality of higher education institutions relatively easy**, regardless of whether they are familiar with the entire quality assurance system on the national level. If we thought that the publishing of some of these documents on ASHE’s website represented transparency, it would mean that we assume that every person in the Republic of Croatia who wishes to find information about the quality of higher education institutions knows about the Agency for Science and Higher Education and what it does. Since this is not likely, we believe that, in order to achieve full transparency, it is important that all higher education institutions publish the results of external quality assurance procedures, or links to these results, on their own websites. The index has been calculated for every higher education institution and a detailed explanation of the index can be found in the *Guide*.

The second part of the analysis concerns the transparency of internal quality assurance and enhancement procedures. As there is no prescribed common approach to structuring internal quality assurance systems to which higher education institutions must adhere, it was not possible to construct a transparency index due to the differences and specificities of individual systems at different higher education institutions. Instead of creating an index, we have descriptively analysed **three indicators of transparency of internal quality assurance systems**: public accessibility of information about the bodies in charge of quality assurance, public accessibility of key documents that establish and regulate quality assurance systems and procedures, and public accessibility of results and/or analyses of student surveys. More information on the indicators can be found in the *Guide*.

Finally, we analysed the official assessments of the quality of Zagreb’s higher education institutions that are available in the documents resulting from the quality assurance procedures implemented by the Agency for Science and Higher Education. For the purpose of this analysis, we used the documents resulting from the re-accreditations and audits of higher education institutions, and as the three indicators of quality we used: the assessments of seven quality standards contained in ASHE’s accreditation recommendations, the outcome of ASHE’s final accreditation recommendation regarding the issuing of a licence to operate and the degree of the development and efficiency of internal quality assurance systems. The first two indicators result from the re-accreditation of higher education institutions, while the third one result from the audit. A more detailed description of the indicators and methods used in the analysis can be found in the *Guide*.

Following the analysis of individual indicators, at the end of this Report on the Transparency of Quality Assurance at Higher Education Institutions in the City of Zagreb, you will find a table overview of the assessments of the quality standards contained in ASHE’s accreditation recommendations for all higher education institutions included in this report. In addition, the same subchapter contains a table of overview of ratings of ESG standards of all higher education institutions that underwent an audit. These overviews are singled out in order to provide a clear and simple outline of the assessments of relevant quality assurance processes in higher education. This boosts the transparency of these data and provides an overview of the general state of quality assurance at higher education institutions in the City of Zagreb.
2.2. The transparency of external quality assurance and enhancement procedures

In this part of the report, we will focus on the analysis of the transparency of the procedures of the external quality assurance and enhancement system. There are several such procedures in the Republic of Croatia, but for the sake of this analysis, we will focus on two: the re-accreditation and the periodic independent external audit of internal quality assurance systems. The reason for focusing on these two procedures is that the greatest number of higher education institutions has been through at least one of them.

In total, forty-two higher education institutions went through re-accreditation, eight are still undergoing the procedure, and four have not been through the procedure. There are different reasons why some higher education institutions have not undergone the re-accreditation procedure. The non-integrated universities do not go through this procedure, only their constituent units do; while the newly-founded higher education institutions recently underwent initial accreditation and are therefore not yet scheduled to go through re-accreditation, which is the case with some other higher education institutions as well. When it comes to the audit, the situation is completely different: only ten institutions have been through this procedure, primarily because it is not mandatory for all higher education institutions.

(Figure 3.) Higher education institutions and the re-accreditation procedure
We were able to calculate the transparency index for forty-five higher education institutions that have been through the re-accreditation and/or audit procedures, out of a total of fifty-four higher education institutions in the City of Zagreb.

The lowest index calculated is 1 and the highest one is 5, while the average transparency index for all higher education institutions is 2.44 (SD=1.41) on the scale of 1 to 5. When indices are compared with regard to the types of higher education institutions, it can be seen that the university constituent units have the highest average transparency index of 2.68 (SD=1.55), while university colleges of applied sciences have the lowest average transparency index - 1.82 (SD=1.09). In addition, university constituent units and universities of applied sciences have an almost identical transparency index. Due to the small sample size of the universities of applied sciences (three), this result should be taken with a grain of salt, but it might suggest that larger institutions are more transparent. In any case, this finding calls for further research.
It is interesting to analyse whether there are differences between public and private higher education institutions when it comes to transparency. Figure 6. shows that both private and public higher education institutions have quite low average transparency indices - 1.88 (SD=1.06) and 2.62 (SD=1.49) respectively, but there is a clear difference in transparency in favour of public institutions.

If we analyse individual higher education institutions, we see that the three most transparent institutions according to our index are the Faculty of Chemical Engineering and Technology, the University Centre for Croatian Studies and Catholic Faculty of Theology, followed by the Polytechnic of Zagreb and the Faculty of Metallurgy. Figure 7. also shows the existence of no fewer than twelve institutions (index=1.00) that have been through the re-accreditation and/or audit procedures, but do not have a single document that resulted from these procedures publicly available on their official websites.
Figure 7. The transparency index of individual higher education institutions
By analysing the frequency of responses regarding the public accessibility of re-accreditation documents, we can see which documents are most commonly not publicly accessible. In the case of re-accreditation, in Figure 8., it can be observed that only slightly over half (56%) of higher education institutions have made their self-evaluation reports publicly accessible. Since self-evaluation reports are not published on ASHE’s website, the websites of higher education institutions are the only places where these documents can be accessed. In terms of transparency, higher education institutions have an even worse track record when it comes to the Minister’s decisions on issuing licences, which only one third of institutions have made publicly available, while only one-fourth (24%) have published concise and clear overviews of the results of re-accreditations. Specifically, while other accreditation documents merely need to be made publicly available, a concise and clear overview is not produced in a re-accreditation procedure but needs to be separately and subsequently prepared before publication. Some higher education institutions have offered the explanation that aforementioned documents have not been made public because there is no legal obligation for them to do so. However, in order for relevant information about quality to be presented transparently to interested stakeholders, it is important for these documents to be publicly available.

Particularly interesting is the finding that concerns the Minister’s decisions on issuing licences. ASHE publishes all the re-accreditation documents for which the agency is responsible on its website, which means that it publishes neither the self-evaluation reports (which are produced by higher education institutions) nor the Minister’s decisions, which are under the jurisdiction of the Ministry of Science and Education. The Ministry does not publish these decisions either, thus right now it is not possible to publicly access this information, which presents a big problem from the perspective of the transparency of the procedure. Since current legislation states that the Minister makes the final decision in the re-accreditation procedure based on the accreditation recommendation, but is not legally bound by it, it is important for the Ministers’ decisions to be publicly available as well.

Also interesting is the finding that only 24% of higher education institutions have published clear and concise overviews of the results of the accreditation procedure (for the most part, they publish only a summary in table form which was prepared by ASHE). From the perspective of the legibility of documents and the user’s perspective, it is of utmost importance for higher education institutions to make the results of the complex re-accreditation procedure clearer and more accessible to all interested parties (pupils, students, etc.), led by the notion that one should not need to be familiar with the national quality assurance system.

(Figure 8.) The frequency of publishing documents resulting from the re-accreditation procedure

<table>
<thead>
<tr>
<th>Document category</th>
<th>Published</th>
<th>Not published</th>
<th>Document not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-evaluation</td>
<td>56%</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>Expert committee’s final report</td>
<td>62%</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>ASHE’s accreditation recommendation</td>
<td>58%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Minister’s decision on issuing a licence</td>
<td>64%</td>
<td>36%</td>
<td>0%</td>
</tr>
<tr>
<td>Clear and concise overview of the results of the procedure</td>
<td>78%</td>
<td>22%</td>
<td>0%</td>
</tr>
</tbody>
</table>

32 When it comes to the Minister’s decisions and the issuing of licences, the total number of higher education institutions analysed based on this criteria is 44 instead of 45. The Faculty of Chemical Engineering and Technology, which went through the re-accreditation procedure during the academic year 2014-2015, has not yet received the Minister’s decision and was thus unable to make it publicly accessible. All other documents from the re-accreditation procedure have been published on the Faculty’s website.
The analysis of the frequency of responses about the public accessibility of documents resulting from the audit shows which documents are most commonly not publicly accessible. In the case of the audit, Figure 9. shows that more than half (60%) of higher education institutions have made the final report with recommendations publicly available, while the rates of publication for other documents are much lower and go no higher than 30%.

(Figure 9.) The frequency of publishing documents resulting from the audit procedure

2.3. The transparency of internal quality assurance procedures

Based on the replies to the questionnaire sent to higher education institutions and information obtained from their websites, we carried out an analysis of the accessibility of information about the activities of higher education institutions' internal quality assurance systems. We analysed to what extent higher education institutions have formed quality assurance bodies and adopted documents which establish internal quality assurance systems and regulate the implementation of internal quality assurance procedures, as well as whether this information is publicly available on their websites. Additional attention was devoted to examining whether institutions publish student survey results and/or analyses of these results, as this is an extremely important and sensitive issue.

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33 The Conclusion as a separate audit document was only introduced in 2012; as a result, this document was not available for four higher education institutions that went through an audit before 2012 and therefore was not included in the index.
Due to the requirements set before higher education institutions by external quality assurance procedures, all higher education institutions have internal documents that regulate quality assurance and internal bodies that are in charge of monitoring, assuring and improving the quality of the parent institution. However, this information are not always publicly and easily accessible to the interested public. As can be seen in Figure 10., two-thirds of higher education institutions (66%) have the published information about their internal quality assurance bodies on their websites, while one-third of higher education institutions have not published this information. The situation is different when it comes to documents that regulate internal quality assurance systems: no less than 85% of higher education institutions have made some of the regulatory documents publicly available on their websites. Although the rate of higher education institutions that do not publish this information is comparatively smaller than is the case with external quality assurance information, there is still a certain number of higher education institutions (eighteen in the case of bodies, seven in the case of documents) that do not approach internal quality assurance transparently.

(Figure 10.) Public accessibility of information on internal quality assurance bodies and documents

When we examine the public and private higher education institutions separately, it is evident that public higher education institutions are more transparent than private ones. Twice as many public higher education institutions (76%) provide transparent information about their quality assurance bodies compared to private higher education institutions (38%). The situation is similar when it comes to documents: 95% of public higher education institutions publish internal quality assurance documents as opposed to 63% of private institutions.
Student surveys are a widespread form of collecting structured and continuous feedback from students. The purpose, form and content of these surveys may vary among institutions, but it is common to most higher education institutions that they carry out some form of student surveys that reflect on the quality of studying. Some surveys only collect data on the quality of study programmes and teaching, while others also include questions about administrative support to students and the operations of the higher education institution as an institution. For the purpose of this research, all institution-wide surveys carried out by higher education institutions will be taken into account regardless of their content.
Figure 13. shows that student survey results and/or analyses of these results are mostly not publicly available - only a quarter (26%) of all higher education institutions transparently publish student survey results or analyses of survey results on their websites. Private institutions have a worse track record in this respect than public institutions - while 36% of public higher education institutions publish student survey results and/or analyses of the results, only 6% of private higher education institutions do the same. (Figure 13.)

Public availability of student survey results and/or analyses of these results

<table>
<thead>
<tr>
<th>Information published</th>
<th>Information not published</th>
<th>Information not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>All higher education institutions</td>
<td>26%</td>
<td>70%</td>
</tr>
<tr>
<td>Public</td>
<td>34%</td>
<td>53%</td>
</tr>
<tr>
<td>Private</td>
<td>6%</td>
<td>88%</td>
</tr>
</tbody>
</table>

It is of utmost importance to promote transparency of student survey results, given that students are one of the major stakeholders in the activities of higher education institutions. If higher education institutions already collect, process and use these data for internal purposes, there is no reason why student survey results and/or analyses of these results should not be publicly and transparently available on higher education institutions' websites.

2.4. Analysis of the official quality assessments of higher education institutions in the City of Zagreb

This part of the report covers the data on the quality of higher education institutions available from the official quality assessments of the Agency for Science and Higher Education (ASHE). For the analysis, we used the documents that result from the re-accreditations and external audits of higher education institutions, and we included only those higher education institutions that went through one of these two procedures. In doing so, we did not independently assess the quality of higher education institutions; instead, we used only publicly available official assessments of quality.
For the purpose of the analysis, we developed three indicators of quality. The first indicator consists of the ratings of seven quality standards contained in the accreditation recommendations that ASHE issues for every higher education institution that goes through re-accreditation. This indicator was calculated for forty-three higher education institutions in the City of Zagreb. Included in the analysis are only those higher education institutions that went through re-accreditation and received accreditation recommendations, with ratings of the seven quality standards, that were subsequently published on ASHE’s or the institutions’ websites.

Of the higher education institutions that went through re-accreditation, the Faculty of Graphic Arts is the only one not included in the analysis of the first indicator because none of the publicly available accreditation recommendations for this faculty include the ratings of quality standards. While these ratings are probably included in some of the documents that are not publicly available, we consider the non-disclosure of documents that contain these ratings to be a failure on ASHE’s part and an example of bad practice. However, it should be kept in mind that the documentation resulting from evaluations is generally readily available to the interested public on ASHE’s website.

When reading the analyses of the first indicator, it should be kept in mind that the ratings contained in accreditation recommendations are descriptive and do not allow for a direct quantitative comparison of individual higher education institutions. However, given that the ratings are hierarchically arranged, for the purpose of analysis and in order to calculate the average values of individual quality ratings, a numeric value from 1 to 5 was assigned to each rating. In the end, the average values are again reported descriptively, rather than as numerical values. When comparing individual higher education institutions, it should be kept in mind that the ratings reflect the extent to which certain standards have been implemented, but do not univocally say which elements of each standard should be improved. For a precise comparison, a more detailed reading and comparison of the final re-accreditation reports is required, which represents an additional step in the analysis that goes beyond the scope of this report. The greatest value of this part of the analysis lies in the comparison of individual quality standards, rather than individual institutions. Based on the calculated average score, it can easily be seen which standards, i.e., areas need to be developed further so that the higher education system could function better.

The second quality indicator are the conclusions of ASHE’s Accreditation Recommendations concerning the issuing of licences to higher education institutions. ASHE may recommend that a higher education institution: be issued the licence to perform all or part of the activities it applied for; be issued a letter of expectation with a deadline for correcting identified deficiencies; or be denied the licence to perform all or part of the activities it applied for. This indicator is shown for forty-four higher education institutions, i.e., for all higher education institutions that have gone through the re-accreditation process, regardless of its outcome.

Some higher education institutions received more than one accreditation recommendation, as they were able to correct identified deficiencies that they were warned of in previous recommendations. In such cases, we referred to the first accreditation recommendation when conducting the analysis of the first and second quality indicators, and we did so for two reasons: firstly, so that the data for different higher education institutions would be comparable, and secondly, because the quality standards were not re-evaluated in follow-up recommendations, instead it was merely determined whether any changes occurred that would result in the issuing of a different recommendation, e.g., whether the requirements for issuing a licence had been met. Examining the follow-up accreditation recommendations allows us to see the extent to which higher education institutions had improved the conditions for carrying out their activities.

34, The study involves also the Faculty of Organisation and Informatics in Varazdin and the Faculty of Metallurgy in Sisak, since they are both constituent units of the University of Zagreb. All higher education institutions included in the analysis have been listed in the graph in Figure 14.

35, At the time of writing this report, the last round of the re-accreditations has been completed; however, ASHE had not yet published the accreditation recommendations and the accompanying documentation. Nevertheless, some higher education institutions had published these documents on their websites, which made it possible to include them in the analysis.

36, From lowest to highest: Not Implemented, In the Initial Stage of Implementation, Partially Implemented, Mostly Implemented, Fully Implemented.
The third quality indicator is the degree of development of higher education institutions’ internal quality assurance systems, expressed through the ratings contained in the final reports of independent external audits conducted by ASHE. Since the audit is a periodical procedure that is not mandatory for all higher education institutions, a significantly lower number of institutions have been through this procedure. In the City of Zagreb, ten higher education institutions went through an audit. Based on the collected data, the degree of development of their internal quality systems is presented for those higher education institutions that have undergone this procedure, and the ratings of the ESG standards are shown for each higher education institution. For some higher education institutions, the degree of development of their internal quality system was rated in the conclusion of the final audit report. For those institutions where this was not the case, we calculated the average degree of development based on the ratings of individual ESG standards. As with the first indicator, numerical values, on a scale of 1 to 4, were added to the descriptive ratings of the ESG quality standards. Descriptive ratings express in what stage of development a particular ESG standard is. Given that the ESG standards of many higher education institutions have been rated as being in between two stages of development, the interval between the ratings is 0.5, so the rating scale has seven degrees.

As with the first indicator, higher education institutions cannot be directly compared based on these ratings. Each ESG standard consists of a number of different elements, thus the rating itself does not express precisely which elements are sufficiently developed, and the final overall rating is dependent on the synergy of all elements. Regardless of this fact, and the fact that only a few higher education institutions went through this type of external evaluation, this indicator is useful for assessing the development of quality assurance systems and understanding which of their elements can be improved.

2.4.1. THE FIRST QUALITY INDICATOR: ratings of seven quality standards

Higher education institutions in the City of Zagreb received rather high average ratings of the seven quality standards. The most common average rating is “Mostly Implemented”: thirty-one out of forty-three higher education institutions (72%) received this average rating of the seven quality standards. Only one higher education institution received an average rating of “Not Implemented”, which constitutes a failing grade – the institution in question is the only one in the sample that received a recommendation that it be denied the licence to perform any activities. On the other hand, only two higher education institutions received the highest average rating of “Fully Implemented”: The Faculty of Electrical Engineering and Computing and Algebra University College. On the one hand, such findings suggest that the quality standards are at a high level on average, but due to the low variability of ratings the question arises as to what extent the ratings can serve to improve quality and whether they reflect the actual situation. Low discrimination of the ratings of quality standards leads to the conclusion that the criteria for assigning the ratings could be stricter. The average rating of quality of all higher education institutions in the City of Zagreb is 3.66 or “Mostly Implemented”.
(Figure 14.) The average rating of seven quality standards of higher education institutions

| Faculty of Agriculture | Faculty of Architecture | Academy of Fine Arts | Faculty of Education and Rehabilitation Sciences | Faculty of Economics and Business | Faculty of Electrical Engineering and Computing | Faculty of Chemical Engineering and Technology | Faculty of Political Science | Faculty of Transport and Traffic Sciences | Faculty of Organization and Informatics | Faculty of Mechanical Engineering and Naval Architecture | Faculty of Pharmacy and Biochemistry | Faculty of Humanities and Social Sciences | Faculty of Philosophy of the Society of Jesus | Faculty of Geodesy | Faculty of Geotechnical Engineering | Faculty of Civil Engineering | University Centre for Croatian Studies | Catholic Faculty of Theology | Faculty of Kinesiology | School of Medicine | Faculty of Metallurgy | Faculty of Food Technology and Biotechnology | Faculty of Science | Faculty of Mining, Geology and Petroleum Engineering | School of Dental Medicine | Faculty of Forestry | Faculty of Textile Technology | Faculty of Teacher Education | Faculty of Veterinary Medicine | Polytechnic of Zagreb | VERNI University of Applied Sciences | International Graduate Business School Zagreb | RRF College for Financial Management | Zagreb Police College | Zagreb School of Business | Agora University College | University College of Economics, Entrepreneurship and Management N.Š. Zrinski | College for Information Technologies | College of Occupational Safety and Health | Algebra University College | Effectus University College for Finance and Law | Zagreb School of Economics and Management |
When each of the quality standards that is rated during re-accreditation is analysed separately (Figure 15), it can be seen that most of the standards on average appear to be close to the “Mostly Implemented” category. Variations among individual standards are relatively small, but Mobility and International Cooperation stands out as somewhat lower rated. This finding is also interesting in the context of EUROSTUDENT research, according to which Croatia is among European countries with relatively low international student mobility and substantial untapped potential for international mobility (Hausschildt et al., 2015). Highest-rated are those quality standards that concern study programmes and students, while the Research and Professional Activities standard is somewhat lower rated. These ratings give the impression that higher education institutions are better equipped for teaching than for research activities.

(Figure 15.) The average rating of individual quality standards

When comparing the universities of applied sciences and university colleges of applied sciences on the one hand and university constituent units on the other, we notice significant differences in the average ratings of the Mobility and International Cooperation and the Research and Professional Activities standards. The difference concerning the latter standard is to be expected, considering the strong focus of universities on scientific activity. However, since international cooperation largely implies research, the difference concerning the former standard is not surprising either. With regard to the other quality standards, the differences are too small to support drawing general conclusions, but it is interesting that the Management of Higher Education Institutions and Quality Assurance is the only standard where universities of applied sciences and university colleges of applied sciences received higher ratings than university constituent units.
When comparing the average ratings of individual quality standards at public and private higher education institutions (Figure 16), we notice nearly the same differences as in the previous comparison between universities of applied sciences and university colleges of applied sciences on the one hand and university constituent units on the other. This is not surprising since the majority of university colleges of applied sciences included in this part of the analysis are privately owned, while university constituent units account for the majority of public institutions that were analysed. A more significant difference compared to the previous comparison is noticed only in relation to the Teachers standard: private higher education institutions received a slightly lower rating for this standard than public higher education institutions.

(Figure 16.) Average ratings of individual quality standards according to the type of ownership of higher education institutions

The most common rating received by university constituent units for all quality standards is “Mostly Implemented”, which is to be expected considering the previous data. “Partially Implemented” is the next most common rating, while none of the University of Zagreb constituent units received the rating of “Not Implemented” for any quality standard. As in the previous graph, the Mobility and International Cooperation standard was most often rated as “In the Initial Stage of Implementation”, followed by Research and Professional Activities. In addition, Figure 17. makes it easier to notice that the Managing Higher Education Institutions and Quality Assurance standard also received lower ratings somewhat more often.
Although the universities of applied sciences and university colleges of applied sciences also most commonly received the “Mostly Implemented” rating for all quality standards, their ratings vary more than the ratings of university constituent units, as can be seen in Figure 18. In addition, these institutions also received the “Not Implemented” rating more often, primarily for the quality standards which pertain to mobility and international cooperation and to research and professional activities. On the other hand, the highest rating of “Fully Implemented” is also received more often by these institutions compared to university constituent units.
The above-mentioned comparisons give us a brief insight into the state of individual quality standards at higher education institutions in the City of Zagreb. Generally speaking, we can say that higher education institutions received relatively high ratings, but also that certain quality standards need to be improved, especially those related to international cooperation and research. These are at the same time areas that institutions should invest in more in the future. In addition, the differences in ratings between different types of higher education institutions offer an opportunity to exchange experiences and best practice among higher education institutions.

2.4.2. THE SECOND QUALITY INDICATOR: ASHE’s final accreditation recommendation for issuing a licence

Considering the high ratings resulting from the re-accreditation procedure, it is no surprise that most higher education institutions - twenty-three out of forty-four (Figure 19.) - received a recommendation from ASHE confirming that they meet necessary requirements for the licence for performing activities. Twenty higher education institutions were issued a letter of expectation with the deadline by which they must correct identified deficiencies, and only one higher education institution received the recommendation that the licence for the entire institution be withheld.

When a higher education institution receives a letter of expectation, it is given the opportunity to correct identified deficiencies by a given deadline. At the time of writing this report, eleven higher education institutions have replied to the letter of expectation and have received at least one new recommendation, seven of which had a different conclusion compared to the first recommendation. The majority of those higher education institutions - six of them - corrected the identified deficiencies and received a recommendation confirming that they meet the requirements for the licence to perform activities. Only one higher education institution was denied the licence to perform a part of its activities. The institution in question is the Faculty of Graphic Arts, which has since ceased to implement a part of its study programme at a location in Split and has accepted the Accreditation Council’s decision. The letter of expectation still applies to the remaining activities implemented by the Faculty of Graphic Arts; at the time of writing this report, the deadline for the Faculty’s response to the letter had not yet expired.

(Figure 19.) The conclusions of the initial accreditation recommendations

37. Some higher education institutions received two or more recommendations after appealing to the first recommendation or responding to the letters of expectation and correcting identified deficiencies. For the purpose of an equal comparison of higher education institutions, the results of initial recommendations that institutions received and the results of final recommendations they received are summarized in pie chart form. When it comes to higher education institutions that received only one recommendation, that recommendation is considered as both the initial and final recommendation.
Based on these results, it can be seen that **Accreditation Recommendations serve as an effective means of improving the quality of higher education institutions.** The recommendations, which are crucial for obtaining a licence, clearly have an impact on improvement; on the other hand, it would be difficult to evaluate the impact of the ratings of quality standards based on this research, since the follow-up re-accreditation recommendations do not contain new ratings.

However, during analysis we observed frequent discrepancies between the ratings assigned to certain quality standards and the accreditation recommendations concerning the issuing of licences. In a number of cases, a certain quality standard was rated positively, but the higher education institution received a letter of expectation precisely due to deficiencies in relation to that standard. The text of the explanation itself also clearly identified the deficiencies of the standard in question, so it is unclear on what criteria the ratings were based. We believe that the accreditation recommendations should be consistent and the assigning of ratings more strict. In this way the ratings would have a more direct impact on improving the quality of higher education institutions. In addition, the same discrepancy occurs between the narrative descriptions and ratings in the final reports of expert committees.

### 2.4.3. THE THIRD QUALITY INDICATOR: The degree of development and efficiency of internal quality assurance systems

The degree of the development and efficiency of internal quality assurance systems of higher education institutions is assessed through periodic independent external audits. **Ten higher education institutions in the City of Zagreb went through an audit,** which represents 18.5% of higher education institutions in this area. Based on the collected data, the degree of development of internal quality systems of those higher education institutions that underwent this procedure is presented in Figure 21. It is not surprising that the ratings are relatively high although, compared to the accreditation recommendations’ ratings of quality, the variability of ratings is higher here. The average rating is 3.2, thus we can say that, on average, the quality assurance systems of higher education institutions that underwent an audit are in the “Developed Stage”. One can assume that the higher education institutions that agreed to an audit are more dedicated to developing their internal quality assurance systems, which results in high ratings. Of these ten higher education institutions, seven received ASHE’s certificate confirming they have effective, developed and functionally structured quality assurance systems (Table 4).
In addition to the above information concerning the high rate of certified institutions, the hypothesis that higher education institutions that undergo an audit are more committed to developing their quality assurance systems is also confirmed by the results of the re-accreditation procedure. Of the ten higher education institutions that underwent an audit, eight of them also underwent re-accreditation and as many as seven received above-average ratings for all quality standards (compare with Figure 14.). This also shows us the importance and benefits of audits for higher education institutions themselves. On the one hand, audits prepare higher education institutions for re-accreditation since the quality standards that are evaluated in both procedures partially overlap. On the other hand, audits are directly aimed at assessing and improving quality assurance systems. Since an efficient and functional quality assurance system directly improves the operations of all other segments of a higher education institution, the audit should be seen as a tool that could significantly improve the quality of managing an institution and the quality of teaching and research.
Table 4. The list of higher education institutions certified by ASHE

<table>
<thead>
<tr>
<th>Certified quality assurance systems of higher education institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Faculty of Electrical Engineering and Computing, University of Zagreb</td>
</tr>
<tr>
<td>2. Algebra University College</td>
</tr>
<tr>
<td>3. Faculty of Organization and Informatics, University of Zagreb</td>
</tr>
<tr>
<td>4. School of Medicine, University of Zagreb</td>
</tr>
<tr>
<td>5. VERN’ University of Applied Sciences</td>
</tr>
<tr>
<td>6. Polytechnic of Zagreb</td>
</tr>
<tr>
<td>7. Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb</td>
</tr>
</tbody>
</table>

As with the ratings of quality standards in accreditation procedures, the audit ratings are also relatively high and only slightly vary among individual ESG quality standards. The Policy and Procedures for Quality Assurance standard is the area that needs to be improved the most, even at those higher education institutions that received high ratings. Although most higher education institutions have developed documents and procedures, occasionally they contain discrepancies and contradictions, which is the main reason for this quality standard’s somewhat lower average rating. It is indicative that Research is again the second-lowest rated ESG standard. This finding suggests that a better quality assurance system in a specific area of activity of a higher education institution indeed leads to a higher quality of that area, i.e., that deficiencies in the quality assurance system or any part thereof are reflected in the actual activities of the higher education institution.

Figure 22. The average ratings of the ESG quality standards

ESG1: Policy and Procedures for Quality Assurance
ESG2: Approval, Monitoring and Periodic Review of Programmes and Awards
ESG3: Research
ESG4: Student Assessment
ESG5: Quality Assurance of Teaching Staff
ESG6: Educational Resources and Student Support
ESG7: Information Systems
ESG8: Public Information

Preliminary Stage
Initial Stage
Developed Stage
Advanced Stage
### 2.4.4. An overview of the ratings of higher education institutions: Re-accreditation and Audit

(Table 5.) The ratings of quality standards according to the Accreditation Recommendations of ASHE - City of Zagreb

<table>
<thead>
<tr>
<th>Higher education institution</th>
<th>Managing Higher Education Institutions and Quality Assurance</th>
<th>Study programmes</th>
<th>Students</th>
<th>Teachers</th>
<th>Research and Professional Activities(^\text{38})</th>
<th>Mobility and International Cooperation</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Agriculture</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Architecture</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>Academy of Fine Arts</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Education and Rehabilitation Sciences</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>In the Initial Stage of Implementation</td>
</tr>
<tr>
<td>Faculty of Economics and Business</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>Faculty of Electrical Engineering and Computing</td>
<td>Fully Implemented</td>
<td>Fully Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Chemical Engineering and Technology</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Political Science</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
</tr>
</tbody>
</table>

\(^{38}\) For universities and their constituent units this standard refers to “scientific and professional activities” while for universities of applied sciences and university colleges of applied sciences, unless they are registered in the Register of Scientific Organizations, this standard refers to “professional and research activities.” For the purpose of analysis, in this research these categories are considered to be equivalent.
<table>
<thead>
<tr>
<th>Higher education institution</th>
<th>Ratings of quality standards according to the Accreditation Recommendations of the Agency for Science and Higher Education (ASHE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Transport and Traffic Sciences</td>
<td>Managing Higher Education Institutions and Quality Assurance</td>
</tr>
<tr>
<td></td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Organization and Informatics</td>
<td>Partly Implemented</td>
</tr>
<tr>
<td>Faculty of Mechanical Engineering and Naval Architecture</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Pharmacy and Biochemistry</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Humanities and Social Sciences</td>
<td>Partly Implemented</td>
</tr>
<tr>
<td>Faculty of Philosophy of the Society of Jesus</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Geodesy</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Geotechnical Engineering</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>Faculty of Civil Engineering</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>University Centre for Croatian Studies</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Catholic Faculty of Theology</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Kinesiology</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>School of Medicine</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Higher education institution</td>
<td>Ratings of quality standards according to the Accreditation Recommendations of the Agency for Science and Higher Education (ASHE)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Managing Higher Education Institutions and Quality Assurance</td>
</tr>
<tr>
<td>Faculty of Metallurgy</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Food Technology and Biotechnology</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>Faculty of Science</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Mining, Geology and Petroleum Engineering</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>School of Dental Medicine</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>Faculty of Forestry</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td>Faculty of Textile Technology</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Teacher Education</td>
<td>In the Initial Stage of Implementation</td>
</tr>
<tr>
<td>Faculty of Veterinary Medicine</td>
<td>Mostly Implemented</td>
</tr>
</tbody>
</table>

### UNIVERSITIES OF APPLIED SCIENCES

<table>
<thead>
<tr>
<th>University</th>
<th>Ratings of quality standards according to the Accreditation Recommendations of the Agency for Science and Higher Education (ASHE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polytechnic of Zagreb</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>VERN’ University of Applied Sciences</td>
<td>Mostly Implemented</td>
</tr>
</tbody>
</table>

### UNIVERSITY COLLEGES OF APPLIED SCIENCES

<table>
<thead>
<tr>
<th>College</th>
<th>Ratings of quality standards according to the Accreditation Recommendations of the Agency for Science and Higher Education (ASHE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRIF College for Financial Management</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Zagreb Police College</td>
<td>Mostly Implemented</td>
</tr>
</tbody>
</table>
## Ratings of quality standards according to the Accreditation Recommendations of the Agency for Science and Higher Education (ASHE)

<table>
<thead>
<tr>
<th>Higher education institution</th>
<th>Managing Higher Education Institutions and Quality Assurance</th>
<th>Study programmes</th>
<th>Students</th>
<th>Teachers</th>
<th>Research and Professional Activities</th>
<th>Mobility and International Cooperation</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zagreb School of Business</td>
<td>Partially Implemented</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Not implemented</td>
<td>Not implemented</td>
<td>Partially</td>
</tr>
<tr>
<td>Agora University College</td>
<td>Partially Implemented</td>
<td>Partially</td>
<td>Partially</td>
<td>In the Initial Stage of Implementation</td>
<td>Not implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Partially</td>
</tr>
<tr>
<td>University College of Economics, Entrepreneurship and Management Nikola Šubić Zrinski</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>College for Information Technologies</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Not implemented</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>College of Occupational Safety and Health</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Algebra University College</td>
<td>Fully Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td>Effectus University College for Finance and Law</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
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<td>Fully Implemented</td>
</tr>
<tr>
<td>Zagreb School of Economics and Management</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
</tr>
</tbody>
</table>
Table 6. Ratings of the ESG quality standards of higher education institutions based on the independent external audit - City of Zagreb

LEGEND

- Preliminary Stage
- Initial Stage
- Initial/Developed Stage
- Developed Stage
- Developed/Advanced Stage
- Advanced Stage

<table>
<thead>
<tr>
<th>HIGHER EDUCATION INSTITUTION</th>
<th>Development and efficiency of internal quality assurance systems of higher education according the the ESG standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ESG 1: Policy and Procedures for Quality Assurance</td>
</tr>
<tr>
<td>The University of Zagreb</td>
<td>Initial stage</td>
</tr>
<tr>
<td>Faculty of Electrical Engineering and Computing</td>
<td>Initial Stage</td>
</tr>
<tr>
<td>Faculty of Organization and Informatics</td>
<td>Initial/Developed Stage</td>
</tr>
<tr>
<td>Faculty of Mechanical Engineering and Naval Architecture</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>School of Medicine</td>
<td>Developed Stage</td>
</tr>
</tbody>
</table>

39. Although the Research standard was analysed during the audits of higher education institutions that implement only vocational study programmes (universities of applied sciences and university colleges of applied sciences), it was not always rated. Of the three vocational higher education institutions in this report, this standard was rated only for the University of Applied Health Sciences.
<table>
<thead>
<tr>
<th>Institution</th>
<th>The initial phase</th>
<th>The initial phase</th>
<th>The initial phase</th>
<th>Initial/Developed Stage</th>
<th>Developed Stage</th>
<th>The initial phase</th>
<th>Initial/Developed Stage</th>
<th>Initial/Developed Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Metallurgy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polytechnic of Zagreb</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
<td>No grade</td>
<td>Initial/Developed Stage</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
<td>Developed/Advanced Stage</td>
</tr>
<tr>
<td>VERN' University of Applied Sciences</td>
<td>Developed/Advanced Stage</td>
<td>Developed Stage</td>
<td>No grade</td>
<td>Developed Stage</td>
<td>Advanced Stage</td>
<td>Advanced Stage</td>
<td>Advanced Stage</td>
<td>Developed/Advanced Stage</td>
</tr>
<tr>
<td>University of Applied Health Sciences</td>
<td>The initial phase</td>
<td>The initial phase</td>
<td>The initial phase</td>
<td>The initial phase</td>
<td>The initial phase</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>Algebra University College</td>
<td>Developed Stage</td>
<td>Advanced Stage</td>
<td>No grade</td>
<td>Advanced Stage</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
<td>Advanced Stage</td>
</tr>
</tbody>
</table>

NIKOLINA SVALINA

Nikolina Svalina

3.1. Introduction and basic methodological remarks

This report encompasses all of the higher education institutions in Osijek-Baranja County, i.e. the constituent units of the Josip Juraj Strossmayer University of Osijek and the Evangelical Theological Seminary in Osijek. The objective of this and other reports contained in this publication is to provide a general picture of the transparency of quality assurance procedures in higher education and of the level of quality of higher education institutions in selected counties. Indirectly, we would like this report and the entire QUALITYWATCH project to emphasize the importance of quality assurance in higher education and encourage higher education institutions to publish quality assurance information as transparently and systematically as possible.

At the time of writing this report, there was only one university operating in the Osijek-Baranja County: the Josip Juraj Strossmayer University of Osijek, which consists of seventeen constituent units (eleven faculties, one academy and five university departments). In addition to these institutions, Osijek-Baranja County also
has one university college of applied sciences that is not a constituent unit of the University. Almost all of the University’s constituent units are located in Osijek-Baranja County; the only one that operates outside of it is the Faculty of Mechanical Engineering in Slavonski Brod. Some of the University’s constituent units deliver study programmes in other counties. The Josip Juraj Strossmayer University of Osijek and all of its constituent units are public institutions, while the Evangelical Theological Seminary in Osijek is a private institution.

A total of 18,004 students were enrolled in the Josip Juraj Strossmayer University of Osijek in the academic year 2015-2016, of which 7,510 were enrolled in undergraduate study programmes, 3,979 in graduate study programmes, 3,259 in integrated study programmes, 1,242 in PhD study programmes, 323 in postgraduate university study programmes and 1,780 in professional study programmes. The University implements a total of ninety-two university study programmes: forty undergraduate study programmes with eight majors, forty-seven graduate study programmes with forty majors, five integrated undergraduate and graduate study programmes, and nine professional study programmes with five majors. The University implements eighteen postgraduate (PhD) university study programmes and twenty-nine postgraduate specialist study programmes. The Evangelical Theological Seminary in Osijek implements two professional study programmes: an undergraduate professional study programme of Theology and a specialist graduate professional study programme of Theology.

The methodology of this report has been explained in detail in the Guide to Monitoring the Transparency of Quality Assurance in Higher Education[^1], which is an integral part of this publication. Additionally, the data on the exact number of higher education institutions included in individual parts of the analysis are listed at the beginning of each subchapter in this report, along the specific methods used in the analysis of particular parts. **The number of higher education institutions included in individual parts of the analysis varies due to the fact that not all higher education institutions have been through all quality assurance procedures that are being analysed.**

Quality assurance data were collected using an online questionnaire sent to higher education institutions and by examining the websites of higher education institutions and the Agency for Science and Higher Education (ASHE). In the analysis, we made use of all publicly available documents produced in the re-accreditation and audit procedures, as well as higher education institutions’ documents concerning quality assurance. Although in certain sections of the report we also analyse the assessments of quality of higher education institutions based on ASHE’s accreditation recommendations, **the focus of the report is on the transparency of data, not their content.**

The research undertaken to gather the data was conducted in January and February 2016 with the help of an online questionnaire created using Google Forms, and it was carried out by a researcher from the Centre for Peace, Nonviolence and Human Rights – Osijek. The first step was drawing up an extensive list of all higher education institutions (universities, university constituent units, universities of applied sciences and university colleges of applied sciences) in Osijek-Baranja County which contained contact information of key persons in charge of quality assurance[^2] and of the deans and vice-deans of these institutions. These persons were sent an invitation to take part in the research; the invitation included information about the project, an explanation of the research and the link to the questionnaire. In addition, the invitation requested specifically that only persons familiar with or in charge of quality assurance reply to the questionnaire. The higher education institutions that did not fill in the questionnaire were sent a reminder by e-mail after two weeks, and those that did not fill in the questionnaire even after the reminder were contacted by phone and reminded again.

**Using the questionnaire, data was collected for eleven out of nineteen[^3] higher education institutions (58%), whereas for the remaining eight higher education institutions the researcher later collected data by searching their official websites. The research was conducted on a sample of nineteen institutions of higher education:**

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[^1]: Josip Juraj Strossmayer University of Osijek, http://www.unios.hr/o-sveuciliству/portret/
[^2]: Heads of quality assurance offices, heads/chairmen of quality assurance committees, presidents of quality assurance commissions and similar.
[^3]: One university, eleven faculties, one academy, five university departments, and one university college of applied sciences.
one public university\textsuperscript{44} and its seventeen constituent units (eleven faculties, one academy, five university departments\textsuperscript{45}) and one private university college of applied sciences\textsuperscript{46}.

(Figure 23.) Sample structure by type of higher education institutions

(Figure 24.) Sample structure by ownership of higher education institutions

The analysis of quality assurance data is divided into three parts. The analysis of the transparency of external quality assurance procedures is presented in the first part. In order to present the information on transparency as legibly as possible, we have created the \textit{transparency index of quality assurance systems}, which is based on the public availability of re-accreditation and audit documents on the websites of higher education institutions (the public availability of each document will be used as an indicator of transparency). As was pointed out earlier in the Guide, some of these documents are systematically published on ASHE’s website and are publicly available for all higher education institutions. However, we believe that any interested party (student, pupil, parent etc.) \textbf{must be able to find information about the quality of higher education institutions relatively easily}, regardless of whether they are familiar with the entire quality assurance system on the national level. If we thought that the publishing of some of these documents on ASHE’s website represented transparency, it would mean that we assume that every person in the Republic of Croatia who wishes to find information about the quality of higher education institutions knows about the Agency for Science and Higher Education and what it does. Since this is not likely, we believe that, in order to achieve full transparency, it is important that all higher education institutions publish the results of external assurance.

\textsuperscript{44} Josip Juraj Strossmayer University of Osijek.

\textsuperscript{45} Faculty of Economics, Faculty of Electrical Engineering, Computer Science and Information Technology, Faculty of Education, Faculty of Humanities and Social Sciences, Faculty of Civil Engineering, Catholic Faculty of Theology in Đakovo, Faculty of Medicine, Faculty of Agriculture, Faculty of Law, Faculty of Food Technology, Faculty of Mechanical Engineering in Slavonski Brod, Academy of Arts, Academy of Arts, Department of Physics, Department of Biology, Department of Chemistry, Department of Mathematics, Department of Cultural Studies.

\textsuperscript{46} Evangelical Theological Seminary.
quality assurance procedures, or links to these results, on their own websites. The index has been calculated for every higher education institution and a detailed explanation of the index can be found in the Guide.

The second part of the analysis concerns the transparency of internal quality assurance and enhancement procedures. As there is no prescribed common approach to structuring internal quality assurance systems to which higher education institutions must adhere, it was not possible to construct a transparency index due to the differences and specificities of individual systems at different higher education institutions. Instead of creating an index, we have descriptively analysed three indicators of transparency of internal quality assurance systems: public accessibility of information about the bodies in charge of quality assurance, public accessibility of key documents that establish and regulate quality assurance systems and procedures, and public accessibility of results and/or analyses of student surveys. More information on the indicators can be found in the Guide.

Finally, we analysed the official assessments of the quality of higher education institutions which are available in the documents resulting from the quality assurance procedures implemented by the Agency for Science and Higher Education. For the purpose of this analysis, we used the documents resulting from the re-accreditations and audits of higher education institutions, and as the three indicators of quality we used: the ratings of the seven quality standards contained in ASHE’s accreditation recommendations, the outcome of ASHE’s final accreditation recommendations regarding the issuing of licences to perform activities, and the degree of the development and efficiency of internal quality assurance systems. The first two indicators are derived from the re-accreditations of higher education institutions, while the third is derived from the audits. A more detailed description of the indicators and methods used in the analysis can be found in the Guide.

Following the analysis of individual indicators, at the end of this Report on the Transparency of Quality Assurance at Higher Education Institutions in Osijek-Baranja County you will find a table with an overview of the ratings of quality standards contained in ASHE’s accreditation recommendations for all higher education institutions included in this report. In addition, the same subchapter contains a table with an overview of ratings of ESG standards of all higher education institutions that underwent an audit. These overviews are singled out in order to provide a clear and simple outline of the assessments of relevant quality assurance processes in higher education. This boosts the transparency of these data and provides an overview of the general state of quality assurance at higher education institutions in Osijek-Baranja County.

3.2. The transparency of external quality assurance and enhancement procedures

In this part of the report, we will focus on the analysis of the transparency of the procedures of the external quality assurance and enhancement system. There are several such procedures in the Republic of Croatia, but for the sake of this analysis, we will focus on two: the re-accreditation and the periodic independent external audit of internal quality assurance systems. The reason for focusing on these two procedures is that the greatest number of higher education institutions has been through at least one of them.
In total, sixteen higher education institutions went through re-accreditation, while two are still undergoing the procedure. This means that all higher education institutions in Osijek-Baranja County have experienced the process. When it comes to the audit, the situation is completely different: only two faculties and the University have been through this procedure, primarily because the audit is not mandatory for all higher education institutions.

(Figure 25.) Higher education institutions and the re-accreditation procedure

(Figure 26.) Higher education institutions and the audit procedure

We were able to calculate the transparency index for seventeen higher education institutions that have been through the re-accreditation and/or audit procedures, out of a total of nineteen higher education institutions in Osijek-Baranja County.

(Table 7.) The number of higher education institutions in the sample for which it was possible to calculate the index

<table>
<thead>
<tr>
<th>Type of higher education institution</th>
<th>Total number of higher education institutions</th>
<th>Number of higher education institutions for which it was possible to calculate the index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>University constituent units</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Universities of applied sciences</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>University colleges of applied sciences</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

The lowest index calculated is 1 and the highest is 5, while the average transparency index for all higher education institutions is 2.33 (SD=1.22) on the scale of 1 to 5. The only university college of applied sciences in the County has the lowest transparency index (1.00) while the transparency index of the University is a mere 2.00.
If we analyse individual higher education institutions, we see that the three most transparent institutions according to our index are the Catholic Faculty of Theology in Đakovo, the Faculty of Humanities and Social Sciences in Osijek and the Faculty of Economics in Osijek, followed by the Faculty of Agriculture and the Department of Biology. Figure 27 also shows that there are no fewer than five institutions (Index=1.00) that have been through re-accreditation, but do not have a single document that resulted from this procedure publicly available on their official websites.

(Figure 27.) The transparency index of individual higher education institutions

Data analysis shows a very low level of transparency of higher education institutions in this County, and the analysis of the frequency of responses regarding the public accessibility of re-accreditation documents shows which documents are most commonly not publicly accessible. In the case of re-accreditation, Figure 28. shows that only half (50%) of higher education institutions have made their self-evaluation reports publicly accessible. Since self-evaluation reports are not published on ASHE's website, the websites of higher education institutions are the only places where these documents can be accessed. The same number of higher education institutions also published the expert committees’ final reports. In terms of transparency, higher education institutions have the worst track record when it comes to the Minister’s decisions on issuing licences which only 19% of institutions have made publicly available, while only 38% of institutions have published ASHE’s accreditation recommendations. Some higher education institutions have explained that they do not publish these documents because there is no legal obligation for them to do so, because accreditation recommendations
can be found on ASHE’s website or because the MOZVAG service contains a list of institutions that have obtained the licence for performing higher education activities. However, in order for relevant information about quality to be presented transparently to interested stakeholders, it is important for these documents to be publicly available on the websites of higher education institutions themselves.

Particularly interesting is the finding that concerns the Minister’s decisions on issuing licences. ASHE publishes all the re-accreditation documents for which the agency is responsible on its website, which means that it publishes neither the self-evaluation reports (which are produced by higher education institutions) nor the Minister’s decisions, which are under the jurisdiction of the Ministry of Science and Education. The Ministry does not publish these decisions either, thus right now it is not possible to publicly access this information, which presents a big problem from the perspective of the transparency of the procedure. Since current legislation states that the Minister makes the final decision in the re-accreditation procedure based on the accreditation recommendation, but is not legally bound by it, it is important for the Ministers’ decisions to be publicly available as well.

Another interesting finding is that only 31% of higher education institutions have published clear and concise overviews of the results of the accreditation procedure (for the most part, they publish only a summary in table form which was prepared by ASHE). From the perspective of the legibility of documents and the user’s perspective, it is of utmost importance for higher education institutions to make the results of the complex re-accreditation procedure clearer and more accessible to all interested parties (pupils, students, etc.), led by the notion that one should not need to be familiar with the national quality assurance system.

(Figure 28.) The frequency of publishing documents resulting from the re-accreditation procedure

The analysis of the frequency of responses about the public accessibility of documents resulting from the audit shows which documents are most commonly not publicly accessible. In the case of the audit, Figure 29. shows that all three higher education institutions have made the final report with recommendations publicly available, while the rates of publication for other documents are much lower and go no higher than 33%. The Faculty of Humanities and Social Sciences has not been rated for publishing a concise and clear overview of the audit results because it received ASHE’s Conclusion only in May of this year.
3.3. The transparency of internal quality assurance procedures

Based on the replies to the questionnaire sent to higher education institutions and information obtained from their websites, we carried out an analysis of the accessibility of information about the activities of higher education institutions’ internal quality assurance systems. We analysed to what extent higher education institutions have formed quality assurance bodies and adopted documents which establish internal quality assurance systems and regulate the implementation of internal quality assurance procedures, as well as whether this information is publicly available on their websites. Additional attention was devoted to examining whether institutions publish student survey results and/or analyses of these results, as this is an extremely important and sensitive issue.

Due to the requirements set before higher education institutions by external quality assurance procedures, all higher education institutions have internal documents that regulate quality assurance and internal bodies that are in charge of monitoring, assuring and improving the quality of the parent institution. However, this

47, The Conclusion as a separate audit document was only introduced in 2012.
information is not always publicly and easily accessible to the interested public. As can be seen in Figure 30., 89% of higher education institutions have published information about their internal quality assurance bodies on their websites, while 11% of higher education institutions have not published this information. The situation is the same when it comes to documents that regulate internal quality assurance systems: no less than 89% of higher education institutions have made some of the regulatory documents publicly available on their websites. Specifically, this means that one constituent unit of the Josip Juraj Strossmayer University of Osijek has published no information about its internal quality assurance bodies, and one has published no documents. The website of the County’s only private higher education institution completely lacks information about quality assurance - there is no information about bodies, documents or surveys.

( Figure 30. ) Public accessibility of information on internal quality assurance bodies and documents

Student surveys are a widespread form of collecting structured and continuous feedback from students. The purpose, form and content of these surveys may vary among institutions, but it is common to most higher education institutions that they carry out some form of student surveys that reflect on the quality of studying. Some surveys only collect data on the quality of study programmes and teaching, while others also include questions about administrative support to students and the operations of the higher education institution as an institution. For the purpose of this research, all institution-wide surveys carried out by higher education institutions will be taken into account regardless of their content. Figure 31. shows that student survey results and/or analyses of these results are only partially available: 58% of all higher education institutions have transparently published student surveys results and/or analyses of the results on their websites.

( Figure 31. ) Public availability of student survey results and/or analyses of these results
It is of utmost importance to promote transparency of student survey results, given that students are the primary focus of the activities of higher education institutions. If higher education institutions already collect, process and use these data for internal purposes, there is no reason why student survey results and/or analyses of these results should not be publicly and transparently available on higher education institutions' websites.

3.4. Analysis of the official quality assessments of higher education institutions in Osijek-Baranja County

This part of the report covers the data on the quality of higher education institutions available from the official quality assessments of the Agency for Science and Higher Education (ASHE). For the analysis, we used the documents that result from the re-accreditations and external audits of higher education institutions, and we included only those higher education institutions that went through one of these two procedures. In doing so, we did not independently assess the quality of higher education institutions, instead we used only publicly available official assessments of quality.

For the purpose of the analysis, we developed three indicators of quality. The first indicator consists of the ratings of seven quality standards contained in the accreditation recommendations that ASHE issues for every higher education institution that goes through re-accreditation. This indicator was calculated for seventeen higher education institutions in Osijek-Baranja County. Included in the analysis are only those higher education institutions that went through re-accreditation and received accreditation recommendations, with ratings of the seven quality standards, that were subsequently published on ASHE’s or the institutions’ websites.

When reading the analyses of the first indicator, it should be kept in mind that the ratings contained in accreditation recommendations are descriptive and do not allow for a direct quantitative comparison of individual higher education institutions. However, given that the ratings are hierarchically arranged, for the purpose of analysis and in order to calculate the average values of individual quality ratings, a numeric value of 1 to 5 was assigned to each rating. In the end, the average values are again reported descriptively, rather than as numerical values. When comparing individual higher education institutions, it should be kept in mind that the ratings reflect the extent to which certain standards have been implemented, but do not univocally say which elements of each standard should be improved. For a precise comparison, a more detailed reading

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48. The study also involves the Faculty of Mechanical Engineering in Slavonski Brod, since it is one of the constituent units of the Josip Juraj Strossmayer University of Osijek.

49. At the time of writing this report, the last round of re-accreditations had been completed; however, ASHE had not yet published all the accreditation recommendations and the accompanying documentation. Nevertheless, some higher education institutions had published these documents on their websites, which made it possible to include them in the analysis.

50. From lowest to highest: Not Implemented, In the Initial Stage of Implementation, Partially Implemented, Mostly Implemented, Fully Implemented.
and comparison of the final re-accreditation reports is required, which goes beyond the scope of this report. The greatest value of this part of the analysis lies in the comparison of individual quality standards, rather than individual institutions. Based on the calculated average score, it can easily be seen which standards, i.e., areas need to be developed further so that the higher education system could function better.

The second quality indicator are the conclusions of ASHE’s Accreditation Recommendations concerning the issuing of licences to higher education institutions. ASHE may recommend that a higher education institution: be issued the licence to perform all or part of the activities it applied for; be issued a letter of expectation with a deadline for correcting identified deficiencies; or be denied the licence to perform all or part of the activities it applied for. This indicator is shown for seventeen higher education institutions, i.e., for all higher education institutions that have gone through the re-accreditation process, regardless of its outcome.

Some higher education institutions received more than one accreditation recommendation as they were able to correct identified deficiencies that they were warned of in previous recommendations. In such cases, we referred to the first accreditation recommendation when conducting the analysis of the first and second quality indicators, and we did so for two reasons: firstly, so that the data for different higher education institutions would be comparable, and secondly, because the quality standards were not re-evaluated in follow-up recommendations, instead it was merely determined whether any changes occurred that would result in the issuing of a different recommendation, e.g., whether the requirements for issuing a licence had been met. Examining the follow-up accreditation recommendations allows us to see the extent to which higher education institutions had improved the conditions for carrying out their activities.

The third quality indicator is the degree of development of higher education institutions’ internal quality assurance systems, expressed through the ratings contained in the final reports of independent external audits conducted by ASHE. Since the audit is a periodical procedure that is not mandatory for all higher education institutions, a significantly lower number of institutions have been through this procedure. In Osijek-Baranja County, the University and two of its faculties have been through the audit. Based on the collected data, the degree of development of their internal quality systems is presented for those higher education institutions that have undergone this procedure, and the ratings of the ESG standards are shown for each higher education institution. As with the first indicator, numerical values, on a scale of 1 to 4, were added to the descriptive ratings of the ESG quality standards. Descriptive ratings express in what stage of development a particular ESG standard is. Given that the ESG standards of many higher education institutions have been rated as being in between two stages of development, the interval between the ratings is 0.5, so the rating scale has seven degrees.

As with the first indicator, higher education institutions cannot be directly compared based on these ratings. Each ESG standard consists of a number of different elements, thus the rating itself does not express precisely which elements are sufficiently developed, and the final overall rating is dependent on the synergy of all elements. Regardless of this fact, and the fact that only a few higher education institutions went through this type of external evaluation, this indicator is useful for assessing the development of quality assurance systems and understanding which of their elements can be improved.

3.4.1. THE FIRST QUALITY INDICATOR: Ratings of seven quality standards

Higher education institutions in Osijek-Baranja County received rather high average ratings of all quality standards. The most common rating is “Mostly Implemented”: ten out of seventeen higher education institutions received this average rating. Only one higher education institution received an average rating of “In the Initial Stage of Implementation”, and the institution in question is also the only one in the sample that received a recommendation that it be denied the licence to perform any activities. On the other hand, only one higher education institution received the highest average rating of “Fully Implemented” - the Faculty of Agriculture in Osijek. One the one
hand, such findings suggest that the quality standards are at a high level on average, but due to the low variability of ratings the question arises as to what extent the ratings can serve to improve quality and whether they reflect the actual situation. The average rating of quality of all higher education institutions in Osijek-Baranja County is 3.50 or “Mostly Implemented”. It should also be pointed out that individual faculties and their ratings cannot be directly compared due to the very fact that some higher education institutions underwent re-accreditation in the academic year 2010-2011, while the newest recommendations are from the procedures conducted in 2014-2015.

It is interesting to note that all accreditation recommendations examine whether institutions meet the requirements prescribed by the Ordinance on the Content of Licences and the seven standards defined by the Criteria for the Assessment of Quality of Higher Education Institutions within Universities, and they contain information on the results of this examination, including the ratings of quality standards. The only exception is the accreditation recommendation received by the Faculty of Electrical Engineering, Computer Science and Information Technology, which does not contain information about the ratings. Furthermore, the ratings were not specified in the Expert Committee’s Report either; instead, we received them after requesting them from ASHE.

(Figure 32.) The average ratings of quality standards of higher education institutions

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51, Ordinance on the Content of Licences and Conditions for Issuing Licences for performing Higher Education Activities, Implementing Study Programmes and Re-accreditation of Higher Education Institutions (OG 24/10).
If we examine each of the quality standards that is rated during re-accreditation separately (Figure 33.), we see that, on average, most of the quality standards of higher education institutions in Osijek-Baranja County seem to be between the categories “Partially Implemented” and “Mostly Implemented”. Variations between most of the standards are relatively small, but Mobility and International Cooperation and Research and Professional Activities stand out as somewhat lower rated standards. This finding is also interesting in the context of the EUROSTUDENT research, according to which Croatia is among European countries with relatively low international student mobility and substantial untapped potential for international mobility (Hausschildt et al., 2015). Highest rated is the standard that concerns students. These ratings give the impression that higher education institutions are better equipped for teaching than for research activities.

If we compare the average ratings of University’s constituent units and those of the only university college of applied sciences in Osijek-Baranja County - the Evangelical Theological Seminary in Osijek52 - we can see that on average the latter received better ratings for all standards, with the exception of the Research and Professional Activities standard which was rated slightly below the average rating received by the University’s constituent units. Of the above-average-rated standards, we would like to single out the Study Programmes standard which has received the rating of “Fully Implemented” and especially the Mobility and International Cooperation standard with the rating of “Mostly Implemented”. We emphasize the latter because it has been noticed that, on average, this standard received substantially worse ratings at higher education institutions in the Republic of Croatia (compare other local reports).

(Figure 33.) The average ratings of individual quality standards of all assessed higher education institutions

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Managing Higher Education Institutions and Quality Assurance</td>
<td>3,59</td>
</tr>
<tr>
<td>2. Study Programmes</td>
<td>3,59</td>
</tr>
<tr>
<td>3. Students</td>
<td>4,00</td>
</tr>
<tr>
<td>4. Teachers</td>
<td>3,65</td>
</tr>
<tr>
<td>5. Research and Professional Activities</td>
<td>2,88</td>
</tr>
<tr>
<td>6. Mobility and International Cooperation</td>
<td>2,82</td>
</tr>
<tr>
<td>7. Resources</td>
<td>3,65</td>
</tr>
</tbody>
</table>

Regarding the frequency of individual ratings, out of a total of a hundred assigned ratings, the “Mostly Implemented” rating accounted for fifty of them, which is the same as all the other ratings combined. It is followed by the “Partially Implemented” rating which accounts for nineteen and “In the Initial Stage of

52. Quality standard ratings received by the Evangelical Theological Seminary - a university college of applied sciences: Management of Higher Education Institutions and Quality Assurance: Mostly Implemented; Study Programmes: Fully Implemented; Students: Mostly Implemented; Teachers: Partially Implemented; Research and Professional Activities: In the Initial Stage of Implementation; Mobility and International Cooperation: Mostly Implemented; Resources: Mostly Implemented.
Implementation” rating which accounts for eighteen of the total number of ratings. All higher education institutions in Osijek combined received only twelve “Fully Implemented” ratings for individual standards, while one constituent unit of University of Osijek received the rating of “Not Implemented” for the Research and Professional Activities standard. Due to the low variability of results, a review of the instruments of measurement is needed in order to obtain a more accurate picture of the development of certain quality standards.

As in the previous graph, the Mobility and International Cooperation standard was most often rated as “In the Initial Stage of Implementation”, followed by Research and Professional Activities. It is concerning that the “In the Initial Stage of Implementation” is the dominant rating for the Mobility and International Cooperation standard. The fact that almost one-third of higher education institutions in Osijek-Baranja County have received this rating for the Research and Professional Activities standard is also not negligible.

( Figure 34. ) The frequency of ratings of quality standards: Higher education institutions in Osijek-Baranja County

3.4.2. THE SECOND QUALITY INDICATOR: ASHE’s final accreditation recommendation for issuing a licence

Out of a total of seventeen higher education institutions that went through the re-accreditation procedure, only five of them received ASHE’s recommendation confirming that they meet the requirements for the licence to perform activities. At the same time, eleven higher education institutions were issued a letter of expectation with the deadline by which they must correct identified deficiencies, and only one higher education institution received the recommendation that the licence for the entire institution be withheld.

When a higher education institution receives a letter of expectation, it is given the opportunity to correct identified deficiencies by a given deadline. At the time of writing this report, six higher education institutions have replied to the letter of expectation and have received at least one new recommendation, four of which had a different conclusion compared to the first recommendation. All higher education institutions that replied to the letter of expectation received the Agency’s recommendation to be issued a confirmation of meeting the requirements. Three higher education institutions received the Agency’s recommendation that
the Minister denies them the licence for performing a part of their activities: The Faculty of Economics for the Accounting professional study programme in Varaždin; the Faculty of Civil Engineering for the Construction professional study programme in Vinkovci and the Faculty of Humanities and Social Sciences for performing scientific activity in the field of natural sciences. The Faculty of Civil Engineering and the Faculty of Humanities and Social Sciences did not object to the opinion of the Accreditation Council. Due to numerous identified deficiencies, low quality ratings and the failure to meet requirements stipulated by regulations, one higher education institution - the Department of Cultural Studies - received a recommendation that the whole institution be denied the licence for performing higher education activities and scientific activities.

(Figure 35.) The conclusions of the initial accreditation recommendations

(Figure 36.) The conclusions of the final accreditation recommendations

The development of a quality assurance system and the raising of quality standards is a lengthy process that requires structures for its implementation and commitment from faculty management and all employees that work at higher education institutions and on quality. It would certainly be useful to conduct a qualitative research after the second round of re-accreditation and audit procedures in order to determine what impact these procedures have on raising the quality of higher education institutions.
3.4.3. THE THIRD QUALITY INDICATOR: The degree of development and efficiency of internal quality assurance systems

The degree of the development and efficiency of internal quality assurance systems of higher education institutions is assessed through periodic independent external audits. In Osijek-Baranja County, only three out of a total of nineteen higher education institutions have been through an audit: the Josip Juraj Strossmayer University of Osijek (in 2012) and two of its constituent units - the Faculty of Civil Engineering (2010) and the Faculty of Humanities and Social Sciences (2010 and 2015), which represents 15.79% of higher education institutions in this County. Based on the collected data, the degree of development of internal quality systems of those higher education institutions that underwent this procedure is presented in Figure 37. The average rating is 2.83, thus we can say that the quality assurance systems of the County’s higher education institutions that underwent an audit are on average in the “Developed Stage”. In addition, the Faculty of Civil Engineering and the Faculty of Humanities and Social Sciences received ASHE’s certificate confirming they have effective, developed and functionally structured quality assurance systems.

(Figure 37.) The degree of the development of internal quality assurance systems

The Faculty of Humanities and Social Sciences went through the audit twice – in 2010 and 2015 – and therefore provides an interesting opportunity to see what progress the institution made in the area of quality assurance considering the passage of time and its previous experience of the audit process. In this period, the Faculty of Humanities and Social Sciences made significant progress in the development of its quality assurance system: the 2010 audit found that the level of development of the majority of the ESG standards was in the “Initial Stage”, and only three standards were rated as being in the “Developed Stage” or in the “Transition from the Initial to the Developed Stage”. It is also interesting to point out that, during follow-up, the Faculty of Humanities and Social Sciences conducted a series of activities in accordance with the recommendations of the Committee, with the aim of improving its quality assurance system, in which it succeeded (Table 8.). Progress has been made in almost all standards, but the greatest improvement has been achieved in Quality Assurance of Teaching Staff and Information Systems.

53 Results from the 2015 audit were used for the purpose of this research.
Table 8. Comparison of the results of the 2010 and 2015 audits of the Faculty of Humanities and Social Sciences in Osijek

<table>
<thead>
<tr>
<th>ESG standard</th>
<th>Audit in 2010</th>
<th>Audit in 2015 Level of development of QAS before follow-up</th>
<th>Audit in 2015 Level of development of QAS after follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG 1.1: Policy and Procedures for Quality Assurance</td>
<td>Initial Stage</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>ESG 1.2.1: Approval, Monitoring and Periodic Review of Programmes and Awards</td>
<td>Transition Between the Initial and Developed Stage</td>
<td>Transition Between the Initial and Developed Stage</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>ESG 1.2.2: Research</td>
<td>Initial Stage</td>
<td>Transition Between the Initial and Developed Stage</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>ESG 1.3: Student Assessment</td>
<td>Initial Stage</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>ESG 1.4: Quality Assurance of Teaching Staff</td>
<td>Initial Stage</td>
<td>Transition Between the Developed and Advanced Stage</td>
<td>Advanced Stage</td>
</tr>
<tr>
<td>ESG 1.5: Educational Resources and Student Support</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>ESG 1.6: Information Systems</td>
<td>Initial Stage</td>
<td>Transition Between the Developed and Advanced Stage</td>
<td>Transition Between the Developed and Advanced Stage</td>
</tr>
<tr>
<td>ESG 1.7.: Public Information</td>
<td>Developed Stage</td>
<td>Transition Between the Developed and Advanced Stage</td>
<td>Advanced Stage</td>
</tr>
</tbody>
</table>

It would be interesting to examine what impact an audit has on the results of re-accreditation. The two faculties in Osijek-Baranja County that went through the audit also underwent the re-accreditation procedure, and the ratings of quality standards they received in the re-accreditation procedure are average compared to those of other higher education institutions in this County (see Figure 32, which shows the average ratings of quality standards of higher education institutions). However, we should take into account that the Faculty of Civil Engineering went through re-accreditation in the academic year 2011-2012 and that it takes time to improve standards and make a noteworthy progress in the area of quality assurance. Due to the small sample and different circumstances, it is not possible to draw conclusions about the impact of the audit on the results of the re-accreditation procedure. However, the audit’s importance and benefit for universities are undisputable. On the one hand, audits prepare higher education institutions for re-accreditation since these procedures partially overlap. On the other hand, audits are directly aimed at quality assurance systems. Since an efficient and functional quality assurance system directly improves the operations of all other segments of a higher education institution, the audit should be seen as a tool that could significantly improve the quality of managing an institution and the quality of teaching and research.

As with the ratings of quality standards in re-accreditation procedures, the audit ratings are also relatively high and only slightly vary among individual ESG quality standards. The area in which higher education institutions need the most development is the ESG1 standard - Policy and Procedures for Quality Assurance; the main issues cited are the frequent and constant change of university ordinances and lack of harmonization with relevant faculty documents (statutes, ordinances, strategies). It is indicative that Research is again the second-lowest
rated ESG standard. This finding suggests that the quality assurance system in a certain area is related to the quality of this area.

(Figure 38.) The average ratings of ESG quality standards
3.4.4. An overview of the ratings of higher education institutions: Re-accreditation and Audit

(Table 9.) The ratings of quality standards according to the Accreditation Recommendations of ASHE Osijek-Baranja County

<table>
<thead>
<tr>
<th>Higher education institution</th>
<th>Ratings of quality standards according to the Accreditation Recommendations of the Agency for Science and Higher Education (ASHE)</th>
<th>Managing Higher Education Institutions and Quality Assurance</th>
<th>Study Programmes</th>
<th>Students</th>
<th>Teachers</th>
<th>Research and Professional Activities</th>
<th>Mobility and International Cooperation</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Economics and Business</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>In the Initial Stage of Implementation</td>
<td>Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Electrical Engineering, Computer Science and Information Technology</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Education</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Humanities and Social Sciences</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Civil Engineering</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic Faculty of Theology in Đakovo</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Medicine</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher education institution</td>
<td>Managing Higher Education Institutions and Quality Assurance</td>
<td>Study Programmes</td>
<td>Students</td>
<td>Teachers</td>
<td>Research and Professional Activities</td>
<td>Mobility and International Cooperation</td>
<td>Resources</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------</td>
<td>------------------</td>
<td>---------</td>
<td>---------</td>
<td>-------------------------------------</td>
<td>--------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Faculty of Agriculture</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Fully Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td></td>
</tr>
<tr>
<td>Faculty of Law</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>In the Initial Stage of Implementation</td>
<td>In the Initial Stage of Implementation</td>
<td>Partially Implemented</td>
<td></td>
</tr>
<tr>
<td>Faculty of Food Technology</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Fully Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td></td>
</tr>
<tr>
<td>Faculty of Mechanical Engineering Slavonski Brod</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td></td>
</tr>
<tr>
<td>Department of Physics</td>
<td>In the Initial Stage of Implementation</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>In the Initial Stage of Implementation</td>
<td>Partially Implemented</td>
<td></td>
</tr>
<tr>
<td>Department of Biology</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td></td>
</tr>
<tr>
<td>Department of Chemistry</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>MostlyImplemented</td>
<td></td>
</tr>
<tr>
<td>Department of Mathematics</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td></td>
</tr>
<tr>
<td>Department of Cultural Studies</td>
<td>In the Initial Stage of Implementation</td>
<td>In the Initial Stage of Implementation</td>
<td>In the Initial Stage of Implementation</td>
<td>Partially Implemented</td>
<td>Not implemented</td>
<td>Partially Implemented</td>
<td>Partially Implemented</td>
<td></td>
</tr>
<tr>
<td>University colleges of applied sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evangelical Theological Seminary in Osijek</td>
<td>Mostly Implemented</td>
<td>Fully Implemented</td>
<td>Mostly Implemented</td>
<td>Partially Implemented</td>
<td>In the Initial Stage of Implementation</td>
<td>Mostly Implemented</td>
<td>Mostly Implemented</td>
<td></td>
</tr>
</tbody>
</table>
### Table 10. Ratings of the ESG quality standards of higher education institutions based on the independent external audit - Osijek-Baranja County

**LEGEND**

- Preliminary Stage
- Preliminary/Initial Stage
- Initial Stage
- Initial/Developed Stage
- Developed Stage
- Developed/Advanced Stage

<table>
<thead>
<tr>
<th>HIGHER EDUCATION INSTITUTION</th>
<th>Development and efficiency of internal quality assurance systems in higher education according to the ESG standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ESG 1.1.: Policy and Procedures for Quality Assurance</td>
</tr>
<tr>
<td>Faculty of Humanities and Social Sciences</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>Faculty of Civil Engineering</td>
<td>Developed Stage</td>
</tr>
<tr>
<td>University of Josip Juraj Strossmayer in Osijek</td>
<td>Initial Stage</td>
</tr>
</tbody>
</table>

SLOBODAN ŠKOPELJA

Slobodan Škopelja

4.1. Introduction and basic methodological remarks

This report encompasses all of the higher education institutions in Split-Dalmatia County. The objective of this and other reports contained in this publication is to provide a general picture of the transparency of quality assurance procedures in higher education and of the level of quality of higher education institutions in selected counties. Indirectly, we would like this report and the entire QUALITYWATCH project to emphasize the importance of quality assurance in higher education and encourage higher education institutions to publish quality assurance information as transparently and systematically as possible.
At the time of writing this report, there were twenty-one higher education institutions operating in Split-Dalmatia County: one university, sixteen university constituent units (faculties, academies and university departments) and four university colleges of applied sciences. The University of Split is a public institution, as are all of its constituent units. All four university colleges of applied sciences are privately-owned. The largest and most important higher education institution in Split-Dalmatia County is the University of Split with its sixteen constituent units and more than 21,000 students. Among the University’s constituent units, two largest by the number of students are the Faculty of Economics and the Faculty of Law with more than 3,500 students combined.

The methodology of this report has been explained in detail in the Guide to Monitoring the Transparency of Quality Assurance in Higher Education, which is an integral part of this publication. Additionally, the data on the exact number of higher education institutions included in individual parts of the analysis are listed at the beginning of each subchapter in this report, alongside specific methods used in the analysis of particular parts. The number of higher education institutions included in individual parts of the analysis varies due to the fact that not all higher education institutions have been through all quality assurance procedures that are being analysed.

Quality assurance data were collected using an online questionnaire sent to higher education institutions and by examining the websites of higher education institutions and the Agency for Science and Higher Education (ASHE). In the analysis, we made use of all publicly available documents produced in the re-accreditation and audit procedures, as well as higher education institutions’ documents concerning quality assurance. Although in certain sections of the report we also analyse the assessments of quality of higher education institutions based on ASHE’s accreditation recommendations, the focus of the report is on the transparency of data, not their content.

The research undertaken to gather the data was conducted in January and February 2016 with the help of an online questionnaire created using Google Forms, and it was carried out by researchers from the MI Association – Split, with the help of employees of the Institute for the Development of Education. The first step was drawing up an extensive list of all higher education institutions (universities, university constituent units, universities of applied sciences and university colleges of applied sciences) in Split-Dalmatia County which contained contact information of key persons in charge of quality assurance and of the deans and vice-deans of these institutions. These persons were sent an invitation to take part in the research; the invitation included information about the project, an explanation of the research and a link to the questionnaire. In addition, the invitation requested specifically that only persons familiar with or in charge of quality assurance reply to the questionnaire. The higher education institutions that did not fill in the questionnaire were sent a reminder by e-mail after two weeks, and those that did not fill in the questionnaire even after the reminder were contacted by phone and reminded again.

Using the questionnaire, data were collected for six out of twenty-one higher education institutions (28.6%), whereas for the remaining fifteen higher education institutions the researchers later collected data through desk research of their official websites. The research was conducted on a sample of twenty-one institutions of higher education: one public university with sixteen constituent units and four university colleges of applied sciences. Out of the twenty-one higher education institutions, seventeen are publically owned, while four are private.

55. Herein referred to as the Guide.
56. Heads of quality assurance offices, heads/chairmen of quality assurance committees, presidents of quality assurance commissions and similar.
57. The University of Split: Faculty of Kinesiology, Faculty of Maritime Studies, University Department of Professional Studies, Faculty of Economics, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Faculty of Science, Faculty of Humanities and Social Sciences, Faculty of Civil Engineering, Architecture and Geodesy, Catholic Faculty of Theology, Faculty of Chemistry and Technology, School of Medicine, Faculty of Law, Academy of Arts, University Department of Marine Studies, University Department for Forensic Sciences, University Department of Health Studies, University College of Inspection and Personnel Management in Split, University College of Management and Design Aspira, Academy of Multimedia and Communication Technologies, Minerva University College of Applied Sciences for Management & IT.
58. For more information on the relationship between the university and university constituent units in this analysis, see chapter 1.3. in the Guide.
The analysis of quality assurance data is divided into three parts. The analysis of the transparency of external quality assurance procedures is presented in the first part. In order to present the information on transparency as legibly as possible, we have created the **transparency index of quality assurance systems**, which is based on the public availability of re-accreditation and audit documents on the websites of higher education institutions (the public availability of each document will be used as an indicator of transparency). As was pointed out earlier in the *Guide*, some of these documents are systematically published on ASHE’s website and are publicly available for all higher education institutions. However, we believe that any interested party (student, pupil, parent etc.) **must be able to find information about the quality of higher education institutions relatively easily**, regardless of whether they are familiar with the entire quality assurance system on the national level. If we thought that publishing some of these documents on ASHE’s website represented transparency, it would mean that we assume that every person in the Republic of Croatia who wishes to find information about the quality of higher education institutions knows about the Agency for Science and Higher Education and what it does. Since this is not likely, we believe that, in order to achieve full transparency, it is important that all higher education institutions publish the results of external quality assurance procedures, or links to these results, on their own websites. The index has been calculated for every higher education institution and a detailed explanation of the index can be found in the *Guide*.

The second part of the analysis concerns the transparency of internal quality assurance and enhancement procedures. As there is no prescribed common approach to structuring internal quality assurance systems to which higher education institutions must adhere, it was not possible to construct a transparency index due to the differences and specificities of individual systems at different higher education institutions. Instead of creating an index, we have descriptively analysed **three indicators of transparency of internal quality assurance systems**: public accessibility of information about the bodies in charge of quality assurance, public accessibility of key documents that establish and regulate quality assurance systems and procedures, and public accessibility of results and/or analyses of student surveys. More information on the indicators can be found in the *Guide*.
Finally, we analysed the official assessments of the quality of higher education institutions which are available in the documents resulting from the quality assurance procedures implemented by the Agency for Science and Higher Education. For the purpose of this analysis, we used the documents resulting from the re-accreditations and audits of higher education institutions, and as the three indicators of quality we used: the ratings of the seven standards of quality contained in ASHE’s accreditation recommendations, the outcome of ASHE’s final accreditation recommendations regarding the issuing of licences to perform activities, and the degree of the development and efficiency of internal quality assurance systems. The first two indicators are derived from the re-accreditations of higher education institutions, while the third is derived from the audits. A more detailed description of the indicators and methods used in the analysis can be found in the Guide.

Following the analysis of individual indicators, at the end of this Report on the Transparency of Quality Assurance at Higher Education Institutions in Split-Dalmatia County you will find a table with an overview of the ratings of quality standards contained in ASHE’s accreditation recommendations for all higher education institutions included in this report. In addition, the same subchapter contains a table with an overview of ratings of ESG standards of the University of Split, the only higher education institution included in this report that underwent an audit. These overviews are singled out in order to provide a clear and simple outline of the assessments of relevant quality assurance processes in higher education. This boosts the transparency of data and provides an overview of the general state of quality assurance at higher education institutions in Split-Dalmatia County.

4.2. The transparency of external quality assurance and enhancement procedures

In this part of the report we will focus on the analysis of the transparency of the procedures of the external quality assurance and enhancement system. There are several such procedures in the Republic of Croatia, but for the sake of this analysis we will focus on two: the re-accreditation and the periodic independent external audit of internal quality assurance systems. The reason for focusing on these two procedures is that the greatest number of higher education institutions has been through at least one of them.

In total, thirteen higher education institutions in Split-Dalmatia County went through re-accreditation, while ten did not. Out of these thirteen institutions, two have not been included in the analysis of transparency due to the fact that either they had been denied the licence for performing their activities (Minerva University College of Applied Sciences for Management & IT) or their accreditation recommendations did not contain ratings (University Department of Marine Studies). This means that the analyses were conducted on a sample of eleven higher education institutions. There are different reasons why some higher education institutions have not undergone the re-accreditation procedure. The non-integrated universities do not go through this procedure, only their constituent units do; while the newly-founded higher education institutions have recently undergone initial accreditation and have therefore not yet been scheduled to go through re-accreditation, which is the case with some other higher education institutions as well. Regarding the audit, only the University of Split has been through the procedure, primarily because the audit is not mandatory for all higher education institutions.

( Figure 41.) Higher education institutions and the re-accreditation procedure

| 35% | Went through the re-accreditation |
| 65% | Undergoing the re-accreditation |
We were able to calculate the transparency index for twelve higher education institutions that have been through the re-accreditation and/or audit procedures, out of a total of twenty-one higher education institutions in Split-Dalmatia County. We should emphasize that the process of re-accreditation is still in progress, which significantly affects the overview of the results.

The lowest index calculated is 1 and the highest is 2.6, while the average transparency index for all higher education institutions is 1.7 on the scale of 1 to 5. Due to the fact that almost half of the higher education institutions in Split-Dalmatia County have not yet completed the re-accreditation procedure, these results need to be taken with a grain of salt. It is advisable to wait until all constituent units of the University of Split complete the re-accreditation procedure before coming to any final conclusions about the level of transparency of quality assurance data in higher education in Split-Dalmatia County. Also, in consideration of the average value of the index, it should be kept in mind that the sample sizes for certain categories (universities and university colleges of applied sciences) are very small.
It is interesting to analyse whether there are differences between public and private higher education institutions when it comes to transparency. Figure 44. shows that both private and public higher education institutions have quite low average transparency indices: 1.8 and 1.7 respectively. Admittedly, due to the fact that there are only four private higher education institutions in Split-Dalmatia County, and it was possible to calculate the transparency index for only one of them, the average index for private institutions is not representative of the set. For a more accurate picture, an analysis would have to be conducted at the national level.59

(Figure 44.) The average index according to the type of ownership of higher education institutions

<table>
<thead>
<tr>
<th>Type of Ownership</th>
<th>Number of Institutions</th>
<th>Average Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>Public</td>
<td>11</td>
<td>1.7</td>
</tr>
</tbody>
</table>

If we analyse individual higher education institutions according to our index, the most transparent institution is the Faculty of Civil Engineering, Architecture and Geodesy. Figure 45. also shows that there are three institutions (index=1.00) that have been through the re-accreditation and/or audit procedures, but do not have a single document that resulted from these procedures publicly available on their official websites.

(Figure 45.) The transparency index of individual higher education institutions

By analysing the frequency of responses regarding the public accessibility of re-accreditation documents we can see which documents are most commonly not publicly accessible. In the case of re-accreditation, Figure 46. shows that only three higher education institutions have made their self-evaluation reports publicly accessible. Since self-evaluation reports are not published on ASHE’s website, the websites of higher education institutions are the only places where these documents can be accessed. Of the remaining re-accreditation

59. In addition, for a better comparison of public and private higher education institutions see the local report for the City of Zagreb, which is a part of this publication.
In addition, from the perspective of the legibility of documents and the user's perspective, it is of utmost importance for higher education institutions to make the results of the complex re-accreditation procedure clearer and more accessible to all interested parties (pupils, students, etc.), led by the notion that one should not need to be familiar with the national quality assurance system. We would therefore like to encourage higher education institutions to publish clear and concise overviews of the results of the accreditation procedures on their websites.

(Figure 46.) The frequency of publishing documents resulting from the re-accreditation procedure

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Published</th>
<th>Not Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-evaluation</td>
<td>27%</td>
<td>73%</td>
</tr>
<tr>
<td>Expert committee's final report</td>
<td>18%</td>
<td>82%</td>
</tr>
<tr>
<td>ASHE's accreditation recommendation</td>
<td>18%</td>
<td>82%</td>
</tr>
<tr>
<td>Minister's decision on issuing a licence</td>
<td>27%</td>
<td>73%</td>
</tr>
<tr>
<td>Clear and concise overview of the results of the accreditation procedure</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
4.3. The transparency of internal quality assurance procedures

Based on the replies to the questionnaire sent to higher education institutions and information obtained from their websites, we carried out an analysis of the accessibility of information about the activities of higher education institutions’ internal quality assurance systems. We analysed to what extent higher education institutions have formed quality assurance bodies and adopted documents which establish internal quality assurance systems and regulate the implementation of internal quality assurance procedures, as well as whether this information is publicly available on their websites. Additional attention was devoted to examining whether institutions publish student survey results and/or analyses of these results, as this is an extremely important and sensitive issue.

Due to the requirements set before higher education institutions by external quality assurance procedures, all higher education institutions have internal documents that regulate quality assurance and internal bodies that are in charge of monitoring, assuring and improving the quality of the parent institution. However, this information is not always publicly and easily accessible to the interested public. As can be seen in Figure 47., more than three-fourths of higher education institutions (76%) have published information about their internal quality assurance bodies on their websites, while one-fourth of higher education institutions have not published this information. The situation is different when it comes to documents that regulate internal quality assurance systems: no fewer than nineteen out of twenty-one higher education institutions (90% of higher education institutions) have made some of the regulatory documents publicly available on their websites. Although the rate of higher education institutions that do not publish this information is comparatively smaller than is the case with external quality assurance information, there remain a small number of higher education institutions (five in the case of bodies, two in the case of documents) that do not approach internal quality assurance transparently.
When we examine public and private higher education institutions separately, we can see that public higher education institutions are more transparent than private ones. No fewer than fifteen out of seventeen public higher education institutions provide transparent information about their quality assurance bodies, whereas the same applies to just one out of four private higher education institutions in the County. The situation is somewhat different when it comes to quality assurance documents as both public and private higher education institutions show high levels of transparency. Specifically, just one public and one private institution had not published any documents concerning internal quality assurance, but because of the large number of public institutions (seventeen) compared to private ones (four), the percentage of transparently published documents is higher for public institutions (88%) than for private ones (75%). We must note that, due to the small number of private higher education institutions, this data should be interpreted with caution.
Student surveys are a widespread form of collecting structured and continuous feedback from students. The purpose, form and content of these surveys may vary among institutions, but it is common to most higher education institutions that they carry out some form of student surveys that reflect on the quality of studying at the institution itself. Some surveys only collect data on the quality of study programmes and teaching, while others also include questions about administrative support to students and the operations of the higher education institution as an institution. For the purpose of this research, all institution-wide surveys carried out by higher education institutions will be taken into account regardless of their content.

Figure 50. shows to what extent student survey results and/or analyses of these results are publicly available - just under half (43%) of all higher education institutions have transparently published student surveys results or analyses of the results on their websites. Four of the remaining twelve higher education institutions made some attempt to publish the surveys and/or survey analyses, but for different reasons (a broken link, surveys are available only via university intranet, or the sample of filled out surveys is insufficient) we were unable to include them among institutions that transparently publish these results. It should be noted that none of the four private higher education institutions has published student survey results and/or analyses of these results, which means that nine out of seventeen public institutions (53%) published them.
It is of utmost importance to promote transparency of student survey results, given that students are one of the major stakeholders in the activities of higher education institutions. If higher education institutions already collect, process and use these data for internal purposes, there is no reason why student survey results and/or analyses of these results should not be publicly and transparently available on higher education institutions’ websites.

4.4. Analysis of the official assessments of quality of higher education institutions in Split-Dalmatia County

This part of the report covers the data on the quality of higher education institutions available from the official quality assessments of the Agency for Science and Higher Education (ASHE). For the analysis, we used the documents that result from the re-accreditations and external audits of higher education institutions, and we included only those higher education institutions that went through one of these two procedures. In doing so, we did not independently assess the quality of higher education institutions; instead, we used only publicly available official assessments of quality.

For the purpose of the analysis, we developed three quality indicators. The first indicator consists of the ratings of seven standards of quality contained in the accreditation recommendations that ASHE issues for every higher education institution that goes through re-accreditation. This indicator was calculated for eleven higher education institutions in Split-Dalmatia County.60 Included in the analysis are only those higher education institutions that went through re-accreditation and received accreditation recommendations, with ratings of the seven quality standards, that were subsequently published on ASHE’s or the institutions’ websites.61 Among the higher education institutions that went through the re-accreditation procedure, the Minerva University College of Applied Sciences for Management & IT was excluded from this part of the analysis as its ratings of the standards of quality have not been published.

When reading the analyses of the first indicator, it should be kept in mind that the ratings contained in accreditation recommendations are descriptive and do not allow for a direct quantitative comparison of individual higher education institutions. However, given that the ratings are hierarchically arranged,62 for the purpose of analysis and in order to calculate the average values of individual quality ratings, a numeric value of 1 to 5 was assigned to each rating. In the end, the average values are again reported descriptively, rather than as numerical

60. Faculty of Economics, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Faculty of Civil Engineering, Architecture and Geodesy, Faculty of Humanities and Social Sciences, Catholic Faculty of Theology, Faculty of Chemistry and Technology, Faculty of Kinesiology, School of Medicine, Faculty of Maritime Studies, University Department of Professional Studies; University College of Management and Design Aspira, Minerva University College of Applied Sciences for Management & IT.

61. At the time of writing this report, the last round of the re-accreditations had been completed; however, ASHE had not yet published the accreditation recommendations and the accompanying documentation. Nevertheless, some higher education institutions had published these documents on their websites, which made it possible to include them in the analysis.

62. From lowest to highest: Not Implemented, In the Initial Stage of Implementation, Partially Implemented, Mostly Implemented, Fully Implemented.
values. When comparing individual higher education institutions, it should be kept in mind that the ratings reflect the extent to which certain standards have been implemented, but do not univocally say which elements of each standard should be improved. For a precise comparison, a more detailed reading and comparison of the final re-accreditation reports is required, which represents an additional step in the analysis that goes beyond the scope of this report. The greatest value of this part of the analysis lies in the comparison of individual quality standards, rather than individual institutions. Based on the calculated average score, it can easily be seen which standards, i.e. areas need to be developed further so that the higher education system could function better.

The second quality indicator are the conclusions of ASHE’s Accreditation Recommendations concerning the issuing of licences to higher education institutions. ASHE may recommend that a higher education institution: be issued the licence to perform all or part of the activities it applied for; be issued a letter of expectation with a deadline for correcting identified deficiencies; or be denied the licence to perform all or part of the activities it applied for. This indicator is shown for eleven higher education institutions, i.e. for all higher education institutions that have gone through re-accreditation process and have the ratings of the seven standards of quality published, regardless of the outcome of re-accreditation.

Some higher education institutions received more than one accreditation recommendation as they were able to correct identified deficiencies they were warned of in previous recommendations. In such cases, we referred to the first accreditation recommendation when conducting the analysis of the first and second quality indicators, and we did so for two reasons: firstly, so that the data for different higher education institutions would be comparable, and secondly, because the standards of quality were not re-evaluated in follow-up recommendations; instead, it was merely determined whether any changes occurred that would result in the issuing of a different recommendation, e.g. whether the requirements for issuing a licence had been met. Examining the follow-up accreditation recommendations allows us to see the extent to which higher education institutions had improved the conditions for carrying out their activities.

The third quality indicator is the degree of development of higher education institutions’ internal quality assurance systems, expressed through the ratings contained in the final reports of independent external audits conducted by ASHE. Since the audit is a periodical procedure that is not mandatory for all higher education institutions, only University of Split has been through this procedure, which made it impossible to conduct the analysis of this quality indicator for Split-Dalmatia County. Based on the collected data, the degree of development of its internal quality assurance system is presented for the University of Split. As with the first indicator, numerical values, on a scale of 1 to 4, were added to the descriptive ratings of the ESG standards of quality. Descriptive ratings express in what stage of development a particular ESG standard is. Given that the ESG standards of many higher education institutions have been rated as being in between two stages of development, the interval between the ratings is 0.5, so the rating scale has seven degrees.

As with the first indicator, higher education institutions cannot be directly compared based on these ratings. Each ESG standard consists of a number of different elements, thus the rating itself does not express precisely which elements are sufficiently developed, and the final overall rating is dependent on the synergy of all elements. Regardless of this fact, this indicator is useful for assessing the development of quality assurance systems and understanding which of their elements can be improved.

Following the analysis of individual indicators, at the end of this Report on the Transparency of Quality Assurance at Higher Education Institutions in Split-Dalmatia County, you will find a table with an overview of the ratings of the standards of quality contained in ASHE’s accreditation recommendations for all higher education institutions included in this report. In addition, the same subchapter contains a table with an overview of ratings of ESG standards of the University of Split, the only higher education institution in the County that underwent an audit. These overviews are singled out in order to provide a clear and simple outline of the assessments of relevant quality assurance processes in higher education. This boosts the transparency of these data and provides an overview of the general state of quality assurance at higher education institutions in Split-Dalmatia County.
4.4.1. THE FIRST QUALITY INDICATOR: Ratings of the seven quality standards

Higher education institutions in Split-Dalmatia County received rather high average ratings of quality standards. The most common rating is “Mostly Implemented”: seven out of eleven evaluated higher education institutions received this average rating, while four received the “Partially Implemented” rating. On the one hand, such findings suggest that the quality standards are at a high level on average, but due to the low variability of ratings the question arises to what extent the ratings can serve to improve quality and whether they reflect the actual situation. Low discrimination power of the ratings of quality standards leads to the conclusion that the criteria for assigning the ratings could be stricter and more precisely defined. The average rating of quality of all higher education institutions in Split-Dalmatia County is 3.51 and is somewhere in between “Partially Implemented” and “Mostly Implemented”. The real average rating is undoubtedly closer to that of “Partially Implemented” because the data does not include the ratings received by the Minerva University College of Applied Sciences for Management & IT, which has been denied the licence to perform activities, since they have not been made public.

(Figure 51.) The average ratings of quality standards of higher education institutions
When each of the quality standards that is rated during re-accreditation is analysed separately (Figure 52.), it can be seen that five out of seven standards are on average close to the “Mostly Implemented” category. Variations among individual standards are relatively small, but Mobility and International Cooperation stands out as somewhat lower rated. This finding is also interesting in the context of the EUROSTUDENT research, according to which Croatia is among European countries with relatively low international student mobility and substantial untapped potential for international mobility (Hausschildt et al., 2015). Highest-rated are the Teachers and Resources standards while the Research and Professional Activities standard is somewhat lower rated. These ratings give the impression that higher education institutions are better equipped for teaching than for research activities.

Due to the small sample, a comparison between university constituent units and university colleges of applied sciences cannot be made. Specifically, only one out of four university colleges of applied sciences in Split-Dalmatia County was rated – the University College of Management and Design Aspira, which received the average rating of “Mostly Implemented”. The ratings of individual standards of quality are shown in the table at the end of this report.

(Figure 52.) Average rating of individual quality standards: constituent units of the University of Split

<table>
<thead>
<tr>
<th>Standard</th>
<th>Not Implemented</th>
<th>In the Initial Stage of Implementation</th>
<th>Partially Implemented</th>
<th>Mostly Implemented</th>
<th>Fully Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Managing Higher Education Institutions and Quality Assurance</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Study Programmes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Research and Professional Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Mobility and International Cooperation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The university constituent units most commonly received the rating of “Mostly Implemented” for all standards of quality, which is to be expected considering the previous data. “Partially Implemented” is the next most common rating, and only one constituent unit of the University of Split received a rating of “Not Implemented” for the Mobility and International Cooperation and Research and Professional Activities standards, thus pointing out that the greatest differences in the quality of constituent units are precisely in the mentioned areas. In the case of other standards of quality, the ratings are very consistent across constituent units, especially when it comes to the Students standard – nine constituent units received the rating of “Mostly Implemented” for this standard, while the remaining two received the rating of “Partially Implemented”.

Given that only one university college of applied sciences in Split-Dalmatia County had completed the re-accreditation procedure at the time of writing this report, it is not possible to make a comparison of ratings of individual quality standards for this type of higher education institutions.
4.4.2. THE SECOND QUALITY INDICATOR: ASHE’s final accreditation recommendation for issuing a licence

Considering the high ratings resulting from the re-accreditation procedure, it is no surprise that most higher education institutions that went through the re-accreditation procedure - six out of thirteen\(^63\) (Figure 55.) - received ASHE’s recommendation confirming that they meet necessary requirements for the licence to perform activities. Six higher education institutions were issued a letter of expectation with the deadline by which they must correct identified deficiencies, and only one higher education institution received the recommendation that the licence for the entire institution be withheld.

Considering that as many as seven higher education institutions did not go through re-accreditation, it is no surprise that only six out of twenty higher education institutions (Figure 55.) received a recommendation from ASHE confirming that they meet the necessary requirements for the licence for performing activities.

When a higher education institution receives a letter of expectation, it is given the opportunity to correct identified deficiencies by a given deadline. At the time of writing this report, two out of six higher education institutions in Split-Dalmatia County had replied to the letter of expectation and had received at least one new recommendation, which had a different conclusion compared to the first recommendation. Only one higher education institution was denied the licence to perform a part of its activities. The institution in question is the School of Medicine, which has since ceased to implement its International PhD Programme in Applied Physiology and has accepted the Accreditation Council’s decision. Concerning the implementation of other study programmes and scientific activities, the School of Medicine received an accreditation confirming that it meets the necessary requirements for the licence.

\(^{63}\) Both higher education institutions that were not included in previous analyses are included in this part of the analysis: the Minerva University College of Applied Sciences and the University of Split’s University Department of Marine Studies. This is because this part of the analysis concerns only the final outcomes of accreditation recommendations, so it was possible to analyse these two institutions on this basis.
Based on these results, it can be seen that accreditation recommendations serve as an effective means of improving the quality of higher education institutions. On the other hand, it is difficult to evaluate the impact of the ratings of quality standards since the repeated re-accreditation recommendations do not contain new ratings.

4.4.3. THE THIRD QUALITY INDICATOR: The degree of development and efficiency of internal quality assurance systems

The degree of the development and efficiency of internal quality assurance systems of higher education institutions is assessed through periodic independent external audits. Given that the University of Split is the only higher education institution in Split-Dalmatia County that underwent the audit procedure, it is not possible to make a comparison between multiple higher education institutions, in a manner similar to how it was done in other local reports in this publication. University of Split has completed the audit and received the average rating of 2.2, so the expert committee concluded that “the University of Split quality assurance system is somewhere between the Initial and the Developed Stage. The Committee expects that the system will continuously improve in the next period and contribute to the advancement of University activities in all aspects.” The areas that the University of Split has to develop most are Policy and Procedures for Quality Assurance, Approval, Monitoring and Periodic Review of Programmes and Awards, and Student Assessment. All other areas are already in or close to the developed stage, but nonetheless deserve attention and development. Since an efficient and functional quality assurance system directly improves the operations of all other segments of a higher education institution, the audit should be seen as a tool that could significantly improve the quality of managing an institution and the quality of teaching and research. The ratings of all ESG standards for the University of Split are shown in the table at the end of this report.
4.4.4. An overview of the ratings of higher education institutions: Re-accreditation and Audit

(Table 12.) The ratings of quality standards according to the Accreditation Recommendations of ASHE - Split-Dalmatia County

<table>
<thead>
<tr>
<th>Higher education institution</th>
<th>Ratings of quality standards according to the Accreditation Recommendations of the Agency for Science and Higher Education (ASHE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Managing Higher Education Institutions and Quality Assurance</td>
</tr>
<tr>
<td>University constituent units U SPLITU</td>
<td></td>
</tr>
<tr>
<td>Faculty of Economics and Business</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Civil Engineering, Architecture and Geodesy</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Faculty of Humanities and Social Sciences</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>Catholic Faculty of Theology</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>Faculty of Chemistry and Technology</td>
<td>Mostly Implemented</td>
</tr>
</tbody>
</table>

64. For universities and their constituent units, this standard refers to “scientific and professional activities”, while for universities of applied sciences and university colleges of applied sciences, unless they are registered in the Register of Scientific Organizations, this standard refers to “professional and research activities.” For the purpose of analysis, in this research these categories are considered to be equivalent.
<table>
<thead>
<tr>
<th>Higher education institution</th>
<th>Ratings of quality standards according to the Accreditation Recommendations of the Agency for Science and Higher Education (ASHE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Managing Higher Education Institutions and Quality Assurance</td>
</tr>
<tr>
<td>Faculty of Kinesiology</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>School of Medicine</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td>Faculty of Maritime Studies</td>
<td>Mostly Implemented</td>
</tr>
<tr>
<td>University Department of Professional Studies</td>
<td>Partially Implemented</td>
</tr>
<tr>
<td>University colleges of applied sciences</td>
<td></td>
</tr>
<tr>
<td>University College of Management and Design Aspira</td>
<td>Partially Implemented</td>
</tr>
</tbody>
</table>
### Table 13. Ratings of the ESG standards of higher education institutions based on the independent external audit - Split-Dalmatia County

<table>
<thead>
<tr>
<th>HIGHER EDUCATION INSTITUTION</th>
<th>Development and efficiency of internal quality assurance systems of higher education according to the ESG standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of Split</td>
<td>Preliminary/Initial Stage</td>
</tr>
</tbody>
</table>

**LEGEND**

- Preliminary Stage
- Preliminary/Initial Stage
- Initial Stage
- Initial/Developed Stage
- Developed Stage
- Developed/Advanced Stage
5. Feasibility Study for the Launch of a National Database for Quality Assurance and Quality Enhancement in Higher Education

NINOSLAV ŠČUKANEC
5. Feasibility Study for the Launch of a National Database for Quality Assurance and Quality Enhancement in Higher Education

Ninoslav Šćukanec

5.1. Introduction

The aim of this Feasibility Study for the Launch of a National Database for Quality Assurance and Quality Enhancement in Higher Education is to provide an overview of the preliminary activities that will need to be carried out before such a launch, to give an overview of the possible content of such a database, to provide examples of similar foreign databases that can serve as examples of good practice, and finally, based on all of this information, to introduce proposals and recommendations for the launch of a Croatian national database.
The aforementioned national database would improve the accessibility and transparency of the data collected (or data that should be collected) within the higher education sector. Currently vast amounts of data are being collected within the higher education sector in Croatia, but this collection of data is mostly decentralised, and therefore remains only partially available at various institutions involved in the development of higher education.

A national database for quality assurance and quality enhancement in higher education would particularly improve the transparency of information and the transparency of decisions that are related to various evaluation procedures being carried out in Croatia’s higher education sector. The external and internal assessment procedures in higher education refer to all the procedures that are regulated by the Croatian Law on Quality Assurance in Science and Higher Education65.

Since vast amounts of data on the quality of higher education institutions are already collected through the aforementioned evaluation procedures, it is important to make use of this information for the following outcomes:

(A) **Evidence-based decision-making** regarding admission, successful progression and completion of studies (this is especially important for students and teachers in secondary schools, university students, university teaching staff and counsellors employed at higher education institutions, and for the parents of students);

(B) **Transparent**, accessible and easily understandable access to data and the outcomes of quality assurance procedures, which would allow for the **improvement of various higher education policies** (this is especially important for policy-makers and civil servants in the area of education policy, administrators in higher education institutions, and educational policy researchers).

This feasibility study is therefore intended for education policy-makers, especially from the Ministry of Science and Education and the Agency for Science and Higher Education (ASHE), which is Croatia’s agency for quality assurance in science and higher education. This study is also intended for those in leadership positions in Croatian higher education institutions, higher education institution employees involved in quality assurance, as well as for higher education teaching staff and students. In addition, this study is aimed at the wider public that is interested in the quality of various dimensions of higher education institutions in Croatia.

The arguments presented in this feasibility study support the aspiration to implement a national database for quality assurance and quality enhancement in higher education in Croatia. Such a national registry would represent a long-term public resource for continuous enhancement of the quality of higher education in Croatia. The implementation of such a database should follow the recommendations outlined in the final chapter of this feasibility study, which represents one of the outcomes of the project “QUALITYWATCH: Croatian Higher Education Quality Watchdog”66.

The outlined recommendations take into account existing national resources, which have already made large amounts of information on the quality of higher education publicly available. This primarily refers to information regarding various assessments that are published on the website of the national agency for quality assurance in science and higher education, ASHE (www.azvo.hr) and on the website Studij.hr (www.studij.hr), which contains information on available study programmes in Croatia. The recommendations propose to integrate different data and documents that are collected by various institutions of higher education (for

66, More information on the project and the project publications available on the project’s website http://www.ipa-qualitywatch.eu/.
which they are the competent institutions) into a unique national database. Integrated data on the quality of higher education will provide a comprehensive overview of the different dimensions of quality, which will allow for more informed and evidence-based decision-making regarding various processes in higher education.

5.2. Actions preceding the launch of a national database

Before launching a national database for quality assurance and quality enhancement in higher education, it is important to analyse the questions listed below and to find the most appropriate answers that take into account the circumstances under which the Croatian higher education system is developing. On this basis, it will be necessary to make critical decisions that will direct further work related to the launch of a national database.

5.2.1. Which target groups is the national database aimed at?

Before implementing a national database, it is necessary to define the target groups that are the intended primary recipients of the information provided. The content and structure of the database will greatly depend on whom the database is intended for. If it is intended for those who decide to enrol in higher education institutions, then the content and structure will primarily be adapted to the needs of students who are in their final year of secondary school, to their teachers and parents, and also to the needs of students planning to continue their studies at a higher level (second or third level studies). Therefore, the content should primarily be focused on providing key information that will ensure the appropriate choice of a study programme at a relevant higher education institution, and on providing information on the basic requirements necessary for enrolment. The content should also provide information on student satisfaction regarding various aspects of learning, teaching, testing and support that are available at any particular higher education institution. In addition, the content would include basic information on the cost of studies, the prospects for finding a job after graduation and expected salary levels.

On the other hand, if the database is intended for higher education policy-makers, senior civil servants, management staff at higher education institutions, teaching staff and researchers, the content and structure of the database will be different from the first example. In this case it will be focused on, among other, information dealing with the outcomes of quality assurance procedures, on the basic features and effectiveness of the teaching and learning process, on the quality of research activities and the transfer of knowledge, on the basic features related to internationalisation, and on the contributions of the higher education community. Such content implies possession of specialised prior knowledge regarding specific higher education policies that are necessary for understanding the information and indicators from the database. Such a database should ensure well-founded decision-making on the further developmental direction of policies, on organisational units or systems, on conducting various research activities, along with others. A scenario in which a national database
would be intended for both above-mentioned target groups is also possible, although this would also have an impact on the content and structure of the database.

**Implication: Before implementing a national database, it is important to define the target groups for which the database is intended.**

### 5.2.2. Which higher education institutions are included in the database and what constitutes an institutional unit?

Within the Croatian context, it is especially important to define what constitutes an institutional unit. Given that not all public universities in Croatia are integrated and that individual university units are legal entities, it is important to determine whether the institutional unit represents the entire university, an individual faculty, an individual department, or some combination of the aforementioned components. The public higher education institutions that were more recently established are mostly integrated, while the largest traditional universities are not. On the website of the Agency for Science and Higher Education (ASHE), there is a classification system of institutional units that the ASHE uses for external quality assessment procedures in higher education. Since a national database should contain the outcomes of conducted external assessment procedures, it is essential to achieve a national consensus on the potential adoption of the ASHE developed model of institutional units, and as to whether or not the model should be modified, or should a combination of existing and new elements be used. In the decision-making process on this matter, it is important to ensure the possibility of comparing various indicators relating to the institutional units that are being evaluated.

In addition to this, it must be decided whether all Croatian higher education institutions will be included in the national database, or will each higher education institution be allowed to independently decide whether its data will be included.

**Implication: Before implementing a national database, it is necessary to decide which institutions will be included in the registry and to form a consensus on the definition of an institutional unit.**

### 5.2.3. Is quality perceived as an objective or a subjective notion?

Quality in higher education can be conceptualised as both an objective and a subjective notion. If we consider it as an objective notion, we assume that one dimension of quality, or one composite quality indicator, applies equally to all units of analysis. On the other hand, if we consider quality in higher education as a subjective notion, we find it important to evaluate various external and internal features within which different institutions operate, and to offer a number of different dimensions and quality indicators. Various international and national higher education institution ranking systems often understand quality objectively, and therefore define a set of quality indicators through which they weigh collected data and consequently produce one composite quality indicator. Such a composite indicator provides a hierarchy of institutions in the form of various numerical rankings in which a specific numerical ranking represents a specific quality level of the entire institution.

Such an approach ignores the specifics of individual institutions and the circumstances in which they operate, i.e. they equally apply the same set of rules to all institutions, regardless of their differences (that is, without regard to the mission of the higher education institution, geographic and cultural specificities, the size of the institution and the size of the budget of the higher education institution, differences between comprehensive
research universities with a global orientation versus smaller higher education institutions specialised in a smaller number of disciplines, regional orientation, etc.). Examples of this objective understanding of quality are the ranking lists of higher education institutions, such as the Academic Ranking of World Universities (ARWU or "Shanghai Ranking")\(^67\), QS World University Ranking \(^68\), and The Complete University Guide \(^69\).

On the other hand, the notion of quality as a subjective concept respects the particularities of the work of a specific higher education institution, and therefore judges the quality contextually. This approach collects and analyses a variety of different dimensions and quality indicators, intended to ensure comparable information between similar higher education institutions. Rather than generating a hierarchy in the form of a numerical scale system, the goal is to inform a target group about the quality of certain aspects of the work of a higher education institution, and on this basis a target group can make an informed decision about a study programme or an institution. An example of this perception of quality is UNISTATS, a public national database of UK undergraduate study programmes and higher education institutions, in which users are able to choose quality indicators, and based on these indicators they are able to analyse a specific study programme at a higher education institution or compare various study programmes at different universities. U-Multirank can also be considered as an example, since it is also a database of higher education institutions and study programmes in which users are able to choose higher education and quality indicators for comparison. A specific feature of U-Multirank is its use of intuitive methods for describing quality, while at the same time utilising a host of imaging solutions for the description and comparison of various quality indicators.

**Implication:** Before implementing a national database, it is necessary to choose either a subjective or an objective approach to the perception of quality.

### 5.2.4. Is it necessary to provide guidance and support to target groups using data and information provided by a national database?

The majority of previously mentioned foreign national databases for improving the quality of higher education are primarily focused on providing information and data, and not on providing support and guidance to target groups to assist them in the effective use of the information from these databases. It is therefore important to consider the option that a national database, in addition to providing information and data, also includes support for specific target groups.

If pupils and students are among the target groups of a database, the question then arises, will they all be able to understand, choose and compare the offered quality indicators and make the right decisions accordingly? It is therefore necessary to consider the possibility of providing support to pupils and students in the form of, for example, online questionnaires that would provide them with answers that could, for instance, facilitate the choice of study programmes at certain higher education institutions. Such questionnaires are “self-assessment tools” that assist pupils and students to more easily define their competencies and interests, which will consequently make their choice of a study programme or a higher education institution easier. Support can also exist in the form of an interview with a counsellor, who can advise students on whether their choice is in accordance with their earlier achievements and future aspirations. These forms of support are particularly important for pupils and students who do not have access to academic career counselling within their family.

\(^{67}\) Additional information available at http://www.shanghairanking.com/index.html

\(^{68}\) Additional information available at https://www.topuniversities.com/university-rankings

\(^{69}\) Additional information available at https://www.thecompleteuniversityguide.co.uk/league-tables/
school or institution of higher education. Support and guidance are especially needed for under-represented and vulnerable groups in secondary and higher education.

The same applies for other target groups, such as higher education policy-makers or employees of institutions that provide educational counselling for pupils and students. In order for their decisions and advice to be both proper and based on the data and information from the database, it is necessary to consider providing support in the form of verbal or written consultations that would allow for further clarification of certain information or data from the database.

**Implication:** When implementing a national database, it should be decided whether a national database will provide professional support and guidance to target groups in the form of, among others, counselling and various questionnaires.

### 5.2.5. What information should be included and who is in charge of the data delivery?

The quality of a national database will depend on the quality and reliability of the information and data it contains. Once consensus is reached on the content of a national database, it is important to determine if such data and information are available at the relevant institutions and ensure that the identified institutions share the necessary data and information. UNISTATS, the previously mentioned database from the United Kingdom\(^70\), contains data submitted by higher education institutions, agencies involved in quality assurance, national bureaus of statistics, public agencies responsible for human resources development, employment bureaus and companies that conduct national research studies on students. Despite UNISTATS being a public database with a long tradition of collecting data (provided mainly by public institutions), the integration of different databases, as well as ensuring the comparability and accuracy of the data, remains a major challenge.

In the Croatian context, it is necessary to take into account the fact that centralised data collection, via a single information system, is not a tradition in higher education. In addition, mutually inconsistent regulations sometimes prevent the delivery and integration of data from different institutions. Since there is no tradition of collecting data, some data either do not exist or are not publicly available - data that would, for example, provide insight into the (non-)completion of studies, the types of organisations and the sectors in which graduates are later employed, as well as the average earnings for graduates and employed students. Creating a national database could encourage the removal of these described obstacles and the more efficient collection of necessary data, thus influencing the enhancement of the quality of higher education.

U-Multirank\(^71\), the database referred to above, uses a combined approach to gathering information. Part of the data that it uses is publicly available, and part is collected through questionnaires completed by higher education institutions. In addition, stakeholders of the database check the accuracy of the submitted data. This method of data collection and processing is extremely demanding in terms of time and human resources, and also requires significant financial resources. It is therefore important to adapt a model of data collection and processing to the objectives that the database must achieve, to the capacities of the stakeholders, as well as to specific circumstances at the national level in terms of regulations and the availability of certain data. In the next section, we will provide a more detailed overview of the types of information that could be included in a database.

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\(^{70}\) More information available on the website https://unistats.direct.gov.uk/.

\(^{71}\) More information available on their website http://www.umultirank.org/#/home.
Implication: When implementing a national database, it is necessary to decide what data and information will be collected, to assess what data and information is available, who will collect and deliver them, and who will be responsible for data quality control.

5.3. Types of information that could be included in a national database

In this chapter, we will provide an overview of the possible content of national databases for the quality enhancement of higher education, and the different approaches to content structuring that the project team of the QUALITYWATCH project arrived at while analysing various foreign databases of this nature. In the final chapter of this publication, we will give a proposal for the content that would be applicable to a national database in the Croatian context.

The content of a database and the quality indicators that a database should contain largely depend on the primary target group for which the database is intended. If the primary target group of a national database are prospective students, then the content of the database should be primarily focused on study programmes, and only secondarily on higher education institutions that offer certain study programmes.

Such a national database could contain the following quality indicators:

(A) A list of study programmes according to the type and level of the programme; basic information about the higher education system at all levels.

(B) Student support in the form of various tools for the self-assessment of competence and interest in studies, and in the form of consultation with educational advisors.

(C) Information on educational inputs, including: the qualifications and requirements needed for enrolment in studies; the number of students enrolled; the student/faculty ratio; the academic qualifications of the teaching staff and the competences of the instructors; the organisation of classes; knowledge and skills assessment; practical training and connections to the labour market; the adequacy of the facilities for teaching and learning; library access; the availability of learning resources; the quality of electronic and communication resources; information on the financial aspects of studying (average total cost of studies, tuition fees, accommodation types and rates); and basic information on the outcomes of external evaluations within the framework of a quality assurance system.

(D) Information on the educational process, including: teaching methodology (teaching based on problem solving, learning through practical training, internationalisation of the curriculum,
etc.); class size; the time required for learning and teaching; support in the form of mentoring (student-mentors and teacher-mentors); support services in the form of career development centres, student counselling, support for under-represented and disadvantaged student groups; opportunities for academic mobility and student exchange; the ability for student self-organising and representation; and possibilities of recognition of non-formal and informal forms of learning.

(E) Information on educational outputs, including: the graduation rate of a study programme and the average time it takes to graduate; drop-out rates; the ratio of the number of students who enrolled and those who graduated.

(F) Information on educational outcomes, including: the proportion of those who further pursue their studies at other levels; employment prospects after graduation; types of organisations and the sectors in which students are gaining employment; the expected job type and salary levels after graduation.

(G) The experience of current students, including: student satisfaction with the quality of teaching; the relationship between the teaching staff and students; the organisation of studies and the schedule of lectures; the possibility to select different courses; student satisfaction with student services and with how well equipped the facilities are.

(H) The experiences of students that completed their studies (alumni), including the relevance of the learning outcomes of the study programme in the workplace and access to social networks of interest.

Example: An example of a national database designed for prospective students is the already mentioned database UNISTATS in the United Kingdom, accessible on their website: https://unistats.direct.gov.uk/.

On the other hand, if the primary target group of a national database are higher education policy stakeholders, employees who administer education institutions or parts of the higher education system, or higher education policy researchers, then the content of the database should be primarily focused on higher education institutions, and only secondarily on the study programmes.

Such a national database could contain the following quality indicators:

(A) Basic characteristics and the efficiency of the teaching and learning process: these characteristics include the majority of quality indicators previously listed under the output dimensions of quality and outcomes of the educational process - among others, the rate of completion of studies for each level of study and the average time needed until graduation, the drop-out rates and employment prospects after graduation.

(B) The efficiency of research activities, linking research and teaching activities and knowledge transfer, which could include: the quality of research in the form of citations in relevant scientific journals.

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72. Some of here mentioned quality indicators were taken from the U-Multirank database that is being referred to below as a good example from practice and as a good example of this type of database.

73. Selection of such indicators depends on the type of higher education institutions that will be included in the database - such indicators will be relevant primarily for universities that have diversified research activity.
and databases; the publishing frequency and types of publications; interdisciplinary research and publications; the utilisation of publications published by employees of the parent higher education institution in the teaching process; income from research projects; research projects implemented in cooperation with industry; number of patents; and number of spin-off companies established by the higher education institution.

(C) **Internationalisation of higher education institutions**, which includes: study programmes available in foreign languages; the proportion of mobile students; the proportion of the teaching staff and non-teaching staff; the number of publications published in cooperation with foreign researchers in foreign publications; the number of foreign students; and the number of foreign employees in the higher education institution.

(D) Information presenting the **contribution of a higher education institution to the local community**, which includes: the number of graduates employed in the local community; the number of internships realised in the local community; the number of cooperation agreements concluded with civil society from the local community; the number of projects that a higher education institution implements in partnership with local self-government units; the number of students who participate in volunteer programmes of local organisations; the number of courses realised in cooperation with organisations from the local community; revenues from local sources; and publications in cooperation with individuals from the local community.

(E) Information on the **implemented procedures of external quality assurance**: expert committee reports regarding the outcomes of evaluations conducted at higher education institutions; recommendations and final decisions related to the outcomes of the most important evaluations (such as accreditations, reaccreditations and audits); and summary overviews and analyses of the results of external and internal evaluation in the system of higher education.

Example: An example of a database that is intended for higher education policy stakeholders, employees who administer higher education institutions and higher education policy researchers is the already mentioned U Multirank database, accessible on their website: http://www.umultirank.org/#!/home.

From the examples mentioned above, we can draw a conclusion that quality indicators contained in databases vary depending on the purpose of the database and for whom it is intended. For these reasons, some databases contain a smaller number of quality indicators, such as the ranking lists of the *Academic Ranking of World Universities* and *QS World University Ranking*, which have only six quality indicators, while other databases, such as *U-Multirank* and UNISTATS, use several dozens of various quality indicators.

By analysing the different foreign databases for enhancing the quality of higher education, the project team of the QUALITYWATCH project found that most quality indicators used in databases of this kind can be grouped into 10 categories or dimensions of quality that are related to various aspects of higher education:

(1) **Learning, teaching and assessment of knowledge and skills**
   - Indicators
     - Structure and organisation of the study programme
     - Organisation of the assessment of knowledge and skills

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(1) Time needed for learning and teaching
(2) Student–teaching staff ratio
(3) Availability of the teaching staff and mentoring assistance
(4) Adequacy of facilities for teaching and learning
(5) Availability of learning resources
(6) Assessment of the teaching process through student surveys

(2) **Financial aspects of studying and the availability of financial support systems**
Indicators:
- The average overall study cost (cost of tuition/registration fees and living expenses)
- Financial support for students
- Availability of various types of student accommodation

(3) **Support services and the institution’s cost per student**
Indicators:
- Student counselling, including learning assistance, legal and psychological assistance, assistance for under-represented and disadvantaged student groups
- Career centres
- Offices for international cooperation
- Student self-organisation and representation programmes
- Student satisfaction with administrative services
- Institution’s cost per student

(4) **Study outcomes, employment and connection with the labour market**
Indicators:
- Study completion rate
- Drop-out rate
- Average time needed to graduate at all three levels of study
- Proportion of those who continue their education at other levels
- Employment prospects after graduation
- Type of institutions and sectors in which graduates gain employment
- Salary expectation after graduation
- Relevance of the learning outcomes of a study programme in the workplace

(5) **The quality of the teaching staff**
Indicators:
- Domestic and international awards and teaching awards
- Student satisfaction with the teaching staff, as measured by student surveys
- Number of teaching staff holding a doctorate degree, especially a doctoral degree acquired outside of the home institution or abroad
- Number of projects implemented in cooperation with the local community, civil society organisations or with industry, and number of implemented projects financed by the EU
- Quality of research and publications in the form of citations in relevant scientific journals and databases
- Use of research findings and publications in the teaching process (among others, the inclusion of publications in course reading lists and linking practical instruction with research results)

(6) **Research activities, linking research and teaching activities, and knowledge transfer**
Indicators:
(•) Quality of research in the form of citations in relevant scientific journals and databases
(•) Publishing frequency and types of publications
(•) Inclusion of own publications (or publications related to the parent higher education institution) in course reading lists
(•) Number of (externally funded) research projects under implementation and generated income
(•) Number of research projects with domestic economy and generated income
(•) Number of patents
(•) Number of spin-off companies established by the higher education institution
(•) Number of post-doctoral positions

(7) International orientation
Indicators:
(•) Study programmes available in foreign languages at all three levels of study
(•) International mobility of students, teaching and non-teaching staff
(•) Number of publications published in cooperation with foreign researchers in foreign publications
(•) Number of doctorates awarded to foreign students
(•) Number of international students
(•) Number of foreign employees in the higher education institution

(8) Social dimension of higher education
Indicators:
(•) Percentage of students whose parents have primary/secondary/tertiary education
(•) Percentage of students from families of lower socioeconomic status
(•) Percentage of students enrolled after the age of 25
(•) Percentage of students with children
(•) Percentage of students with disabilities
(•) Percentage of students who work while studying
(•) Percentage of students who travel to study
(•) Percentage of students who are members of national minorities

(9) Contribution to the community
Indicators:
(•) Number of graduates employed in the local community
(•) Number of internships realised in the local community
(•) Number of cooperation agreements concluded with civil society organisations in the local community
(•) Number of projects that the higher education institution realised in partnership with local government units
(•) Number of students who participate in volunteer programmes in local organisations
(•) Number of courses implemented in cooperation with organisations from the local community.
   This form of cooperation provides the possibility of achieving the learning outcomes of a study programme by utilising a model of learning through commitment to the community.
(•) Revenues from local sources
(•) Publishing in cooperation with individuals from the local community

(10) Outcomes of quality assurance procedures
Indicators:
(•) Expert committee reports with outcome evaluations conducted at higher education institutions
Recommendations and final decisions related to the outcome of the most important evaluation procedures, such as (re)accreditation and audit.

Summaries and analyses of the results of external and internal evaluations in the higher education system.

This list of dimensions and quality indicators is not exhaustive. Any list will depend on the type of national database, and on this basis, a potentially larger or smaller list of dimensions and indicators will be established.

5.4. Foreign examples of national and international databases

Foreign national and international databases can serve as examples for enhancing the quality of higher education and may be useful in determining optimal solutions when creating a Croatian national database. The examples provided below illustrate different approaches to creating databases that show the various dimensions of quality of higher education institutions - examples of two national databases from the United Kingdom and examples of two international databases each represent different models of ranking quality of higher education institutions. The listed examples are only for illustration purposes, as there are other databases available when it comes to this topic. The featured examples were the subject of discussion within the consortium of the QUALITYWATCH project and assisted individual members of the project team in their proposals for specific solutions for a national database in the Croatian context.

**UNISTATS**

[https://unistats.direct.gov.uk/](https://unistats.direct.gov.uk/)

UNISTATS is a website that contains the official national database of undergraduate study programmes and higher education institutions in the United Kingdom, and it is searchable using a host of various criteria. The website is financed from the state budget through the public agency responsible for funding higher education in the United Kingdom. The purpose of the site is to provide reliable and comparable information and data for future students (as well as for those who provide students with assistance in making decisions on continuing their educational career) that presents them with reliable and comparable information and data that will enable them to make informed decisions about a possible academic career. The database includes only those
study programmes and higher education institutions that are accredited by an authorised national quality assurance agency. The website and the database contain data and information gathered from a number of official sources: in addition to quality assurance agencies, information is submitted by higher education institutions, the Higher Education Statistics Agency (HESA), public agencies responsible for human resources development and employment bureaus. Additional data is also gathered from the National Student Survey, which is monitored by public agencies responsible for higher education funding.

The website and database contain information from the National Student Survey that students recognised as critical for their choice of future studies and for their choice of a future higher education institution. These data were presented by several key quality indicators:

- Sets of different quality indicators that illustrate student satisfaction with a specific study programme: indicators of teaching quality, assessing and providing feedback to students, institutional support to students, the organisation of studies, learning resources, developing personal skills, internships, student self-organisation and representation via student organisations;
- Indicators relating to prospects in the labour market;
- Basic information related to the outcome of conducted accreditation procedures;
- Basic information about study costs and student accommodation;
- Basic information about the organisation of studies;
- Basic information on the conditions for enrolment.

Through the above-mentioned national survey, students singled out a set of key quality indicators, which are clearly displayed in a separate section of the website under the title "The key set of information". This section represents a kind of summary of all the indicators and information. Website users can independently choose the criteria according to which they will compare different study programmes at various universities. It is possible to simultaneously compare a number of different study programmes. The great advantage of UNISTATS is that it enables users to review, compare and analyse quality indicators of study programmes and higher education institutions in multiple ways. In addition, the database also encompasses the information collected by the National Student Survey, which allows interested parties to uncover the perspectives and opinions of study programmes from the students themselves. UNISTATS does not generate a ranking list of higher education institutions, rather its primary purpose is to provide a comparative analysis of selected study programmes and higher education institutions.

THE COMPLETE UNIVERSITY GUIDE
http://www.thecompleteuniversityguide.co.uk/

The Complete University Guide (CUG) is a comprehensive website that contains a database of 127 higher education institutions in the United Kingdom, a database their undergraduate and graduate programmes (in 70 areas of study) and a ranking system of higher education institutions and study programmes.

In addition to this content, the CUG provides a range of useful information for studying in the United Kingdom:

- Information on the financial aspects of studying (scholarships, programmes of financial support for students, tips for managing finances to cover study costs);
Information about preparations for studying (advisory assistance for pupils, students and parents, student accommodation, working while studying);

Information for career development (prospects in the labour market, information about employers, potential jobs for graduates with regard to the field of completed studies, expected earnings after graduation, internships);

Information for international students;

Information on the preconditions for admission to higher education institutions (previously acquired qualifications, scores on final exams, etc.).

The purpose of the website is to provide reliable and comparable information and data that will enable future students, as well as all those who assist them in making decisions about continuing their educational career, to make informed decisions on planning and on the future advancement of an academic career. Although the CUG is privately owned, all the data that are used on its website comes from authorised and reliable public sources: the National Student Survey monitored by public agencies responsible for the funding of higher education, and the Higher Education Statistics Agency.

Ranking lists on the CUG website use 10 quality indicators:

1. Standards required for admission to a higher education institution and study programme (final exam scores, the type and level of a previously acquired qualification, etc.)
2. Student satisfaction based on data collected by the National Student Survey, primarily focused on checking the quality of the various aspects of teaching
3. Quality of research conducted at the higher education institution
4. Intensity of research measured by the number of employees involved in research
5. Employability of graduates
6. Student-teacher ratio
7. Cost of academic services, expressed as the expenditure of the higher education institution for all academic services and represented per student. The costs of academic services include all expenses for the library, the entire computing infrastructure and the entire cultural infrastructure (such as museums, galleries, etc.)
8. Cost of student services and facilities, expressed as the expenditure of the higher education institution for all student services and facilities and represented per student. The cost of student services and facilities includes all expenses for the career counselling centres and services, educational, psychological, legal and other forms of counselling, as well as the entire infrastructure for sports, health care, etc.
9. Number of the most successful students determined on the basis of academic achievement among graduated students
10. Percentage of graduation from undergraduate study programmes

The users of the CUG can independently choose different quality indicators, and on this basis, they can compare higher education institutions and study programmes. The basic difference between the CUG and the previously described UNISTATS database is that the CUG offers ranking systems based on the selected quality indicators. UNISTATS does not produce a ranking list, but rather offers different possibilities for a comparative analysis of selected indicators. The CUG, however, produces ranking lists at two basic levels: at the level of higher education institutions and at the level of study programmes. The user can independently select higher

76. Rankings lists of study programmes use the first five of the above-mentioned quality indicators, while the rankings of institutions use all ten of these quality indicators. In addition to these quality indicators, a joint (composite) quality indicator is also being made, which results from all the individual indicators that it entails.
education institutions and study programmes whose ranking results they wish to know, or they can inform themselves on the rankings of all higher education institutions included in the database.

As already mentioned, the great advantage of the CUG is that, in addition to ranking according to a joint (composite) quality indicator, its users can choose any of the individual quality indicators mentioned above and rank higher education institutions or study programmes on the basis of these. Besides using quality indicators, the rankings of higher education institutions or study programmes can also be adjusted according to geographical criteria and by year. An additional advantage of the CUG is that, in addition to comparing higher education institutions and study programmes by ranking, it can also compare them on only the basis of selected quality indicators (i.e. without the ranking results). Since all those interested in studying can access these many possibilities of analysis, comparison and ranking of the most important parameters of quality of higher education institutions and study programmes, it can be assumed that they will be able to make informed decisions about their academic career.

U-MULTIRANK

http://www.umultirank.org/#!/home?trackType=home

Unlike the two previous examples, U-Multirank is a website that compares higher education institutions and study programmes not only at the national, but also at the global level. It contains a database of higher education institutions and study programmes from around the world, i.e. from universities that have provided data by completing a questionnaire. U-Multirank’s managers further examine the validity of the submitted data and also use a set of additional data that are publicly available for certain higher education institutions. U-Multirank was developed for the needs of the European Commission by the Centre for Higher Education Policy Studies (CHEPS) at the University of Twente in the Netherlands.

The purpose of U-Multirank is to provide information about the quality of higher education institutions and study programmes and thus facilitate decision-making for various types of users: university students, teaching and non-teaching staff at higher education institutions, decision-makers at higher education institutions, policy-makers, leaders in the economic sector and others. In this way, U-Multirank seeks to adapt to the different needs of different groups of users and uses a multi-dimensional approach to the quality of higher education.

Its database of higher education institutions and study programmes can be searched according to five dimensions of quality:

(1) Teaching and learning
(2) Research
(3) Knowledge transfer
(4) International orientation
(5) Contribution to the local community.

Each quality dimension includes a number of different quality indicators, meaning that the options for searching, analysing and comparing data provided by U-Multirank include combinations of more than 50 quality indicators included in the database.

U-Multirank does not use composite quality indicators by combining and weighting the indicators included in the five quality dimensions mentioned above. Therefore, U-Multirank does not produce a single ranking according to numerical order, from the best to the worst ones. The creators of U-Multirank believe that “there is
no theoretical or empirical justification for such composite scores”78 that “patronize [its] users”79 by “[defining] the relevance of each indicator uniformly”80 for all types of users. In contrast, U-Multirank believes that different users of rankings have different understandings and priorities about what constitutes the quality of a specific higher education institution and study programme. This approach makes it possible for U-Multirank users to independently choose the quality indicators that will form the basis for searching, analysing and comparing higher education institutions and study programmes. Users can generate different rankings of higher education institutions on the basis of different quality indicators they selected themselves, as well as on the basis of an additional set of self-selected criteria (for example: geographical criteria with respect to the location of the institution; the type, size, age, or the legal status of the higher education institution; or the type of study programme).

“U-Multirank combines institutional ranking (of whole institutions) with a set of field-based rankings that focus on particular academic disciplines or groups of programmes”81 or on scientific field. “Both are equally important”.82 Students, for example, find the ranking of higher education institutions with respect to the programme they want to study more important, while the management staff of higher education institutions or policy-makers place higher importance on information about the quality of an institution as a whole. An additional feature of U-Multirank is the inclusion of various types of higher education institutions in its database. Instead of including only internationally-oriented research universities (which are more represented in the most visible rankings and in the media), U-Multirank has a broader approach and includes higher education institutions with different missions. Besides research universities, it also incorporates universities of applied sciences and colleges whose mission can be to meet regional or local needs of the community in which they are located, specialised institutions such as art and music academies and other types of institutions. In this way, U-Multirank includes individual higher education institutions83 which have never been visible in global rankings before, a number of them showing very good performance on particular indicators.”84

In order to ensure the credibility of the comparison of higher education institutions, U-Multirank allows only the comparison of similar institutions (“like-with-like”). When defining search parameters, users can independently choose different quality indicators that in turn define the profile of the institution; consequently, the search results allow for the comparison of institutions with a similar profile. “It does not make much sense to compare a small regional undergraduate teaching institution with an internationally oriented research university, nor to compare an Arts Academy with a technical university..”84

U-Multirank ranks the institutions according to five different quality assessments that describe the achievements of a higher education institution and are assigned to each quality indicator in the database, with scores ranging from A (very good) to E (poor). Since users of the database independently choose the quality indicators, the generated search results provide a ranking of higher education institutions that not only uses a descriptive approach (using scores from A to E), but also a visual approach (that uses colour and intuitive methods to evaluate quality). Namely, each quality dimension has a different colour and the scores for the quality indicators are presented by differently sized circles. Additionally, summaries of a larger number of indicators are presented in the shape of a circle divided into five colours matching the results of the five quality dimen-

78, The quote is from the U-Multirank’s website http://www.umultirank.org/#/about/methodology/approach-to-ranking?trackType=about&siteMode=undefined&section=undefined
79, Ibid.
80, Ibid.
81, Ibid.
82, Ibid.
83, Ibid.
84, Ibid.
sions. Within this circle, there are a number of concentric sub-circles that use images to display assessments of individual quality indicators. This type of ranking allows for different types of analyses and comparisons that significantly differ from the one-dimensional numerical ranking of higher education institutions - an example of the latter is the Academic Ranking of World Universities (ARWU), which is described below.

ACADEMIC RANKING OF WORLD UNIVERSITIES
http://www.shanghairanking.com/index.html

ARWU is the most renowned website for the numerical ranking of international higher education institutions, whereby the best higher education institutions are located at the top of the list. Unlike U-Multirank, this ranking uses composite indicators on the basis of which a certain higher education institution is awarded a numerical score and is positioned on a scale. A higher education institution's rank is used as an objective quality criterion of the institution for all user groups who use the ranking in question: namely, institutions are not searchable by individual dimensions or quality indicators chosen independently by users.

Nowadays, there are three basic rankings of higher education institutions across the world that can be found on the website:

(•) The ARWU ranking for the entire higher education institution, i.e. a ranking that encompasses the institution as a whole;
(•) The ARWU-Field ranking of higher education institutions according to five areas of science: Natural Sciences and Mathematics; Engineering and Computer Science; Biotechnology; Clinical Medical Sciences and Pharmacy; and Social Sciences;
(•) The ARWU-Subject ranking of higher education institutions according to five study programmes: Mathematics; Physics; Chemistry; Computer Science; and Economics.

The ARWU ranking was established in 2003 by Shanghai Jiao Tong University in China, with the intention of comparing the quality of Chinese higher education institutions with other higher education institutions in the world. Soon after the release of the first ranking, it captured the attention of higher education institutions, governmental institutions, media and the general public around the world. For this reason, the launch of the ARWU ranking outgrew its initial purpose of primarily serving Chinese national needs (especially the needs of decision-makers at higher education institutions and those in government institutions responsible for higher education in China), instead becoming a globally influential ranking that strives to single out the most competitive higher education institutions in the world. It is difficult to assess whom it is intended for nowadays and which purpose it serves: each ARWU ranking, namely, seeks to offer “one version of the truth” regarding the quality of the higher education institution for any user profile. Since 2009, the development and ownership of the ARWU ranking was taken over by the Shanghai Ranking Consultancy. All three rankings are made and published on an annual basis, whereby the ARWU-Field ranking was launched in 2007 and the ARWU-Subject ranking in 2009.

The ARWU ranking assesses higher education institutions according to four quality dimensions and six quality indicators:

(1) **Quality dimension: Quality of education**
   (•) Quality indicator: Number of alumni of the higher education institution that have won the Nobel Prize or an award in a certain scientific field
(2) Quality dimension: Quality of the teaching staff

- Quality indicators: Number of teaching staff that have won the Nobel Prize or an award in a certain scientific field; number of scientists ranked highly on the Thomson Reuters Citation Index

(3) Quality: Research quality

- Quality indicators: Number of scientific articles published in the journals Nature and Science; total number of scientific articles indexed in the Science Citation Index-Expanded (SCIE) and in the Social Science Citation Index (SSCI)

(4) Quality dimension: Achievement per capita

- Quality indicator: Weighted result of the previous five quality indicators, divided by the total number of full-time teaching staff at a particular university.

Each year, the ARWU ranking includes more than 1,200 higher education institutions in the world and the results are published as a ranking of the top 500 higher education institutions. It is noticeable that this type of ranking sees quality primarily through excellence in scientific research and internationally relevant scientific results of a higher education institution. In this way, the ranking mainly includes large research universities whose mission is focused globally and whose intention is to make a higher education institution globally competitive in a certain part of their activities. It is very difficult to include other types of higher education institutions in this type of ranking, such as universities of applied sciences and colleges, or any higher education institution whose mission is primarily focused on teaching and meeting the regional or local needs of the community in which it operates.

5.5. Recommendations and proposals for a Croatian national database

The purpose of this chapter is to present recommendations to assist the structuring and launch of a national database for quality assurance and enhancement in higher education in Croatia. The chapter will also present concrete proposals for a possible structure of the national database, particularly in the form of quality indicators that could be included in the national database (these are presented in Table 1 at the end of this chapter).

As previously mentioned in the Introduction, Croatia already has a national database relating to available study programmes and the higher education institutions that provide them (the website Studij.hr). On the other hand, ASHE is in charge of another national database that contains the results of external evaluation procedures of the quality assurance system. These two databases have different target groups - the first one is primarily intended for future students, while the other is oriented towards higher education policy-makers, senior civil servants, management staff at higher education institutions, teaching staff and researchers. The structure of the content and the layout of the databases vary according to the target groups for which they are intended.

In addition to the aforementioned national databases, Table 14. shows that there are a number of other national databases, that there is a range of relevant research carried out at the national level and that there are a large number of institutions responsible for collecting data on the quality of higher education in Croatia. However, none of these are currently interconnected. Table 14. therefore shows that there is a relatively large amount of collected data on various aspects of the quality of higher education in Croatia, but that there is also a problem of lack of coordination of these activities between relevant institutions. This can result in duplicating activities and wasting resources when collecting data, while the final outcomes do not achieve the intended effects due to the lack of an integrated system of management and the lack of clear strategic goals that are to be achieved by collecting data on the quality of higher education. Therefore, the members of the QUALITYWATCH project consortium recommend the following:
TO LAUNCH A SINGLE NATIONAL DATABASE FOR QUALITY ASSURANCE AND ENHANCEMENT OF HIGHER EDUCATION IN CROATIA FOR THE PURPOSE OF INTEGRATING EXISTING DATA ON THE QUALITY OF HIGHER EDUCATION AND OF MAKING SUCH DATA MORE TRANSPARENT.

(-) To define strategic objectives for data collection in higher education, especially for data on the quality of higher education.

(-) To integrate data on the quality of higher education by ensuring the coordination of competent authorities in the process of defining the types of data to be collected in the process of collecting data. This would avoid duplicating activities.

(-) To include as much publicly available data as possible in the national database in order to reduce data collection via additional questionnaires.

Based on the analyses of international examples of national databases described in this publication, we recommend that Croatia creates a national database that would be aimed at diverse types of users: pupils who plan to continue their education at higher education institutions, including their parents; upper-secondary school teachers and expert associates in schools (pedagogues, psychologists, social workers and other student counsellors); current university students; teaching and non-teaching staff at higher education institutions; employees who manage higher education institutions or parts of the higher education system; and educational policy-makers. Since we suggest that such a national database be aimed at heterogeneous target groups, it is important to adapt the structure and the layout of the database to the needs of these groups. Good examples among the existing databases described in this publication are U-Multirank and, to some extent, UNISTATS. The Croatian national database should allow users to independently choose various quality indicators of study programmes and higher education institutions on the basis of which they could search the database, carry out comparative analyses and create possible rankings.

If a form of ranking is indeed developed, it should arise from a comprehension of quality as having a primary purpose of providing data analyses and of comparisons that can facilitate decision-making in higher education. The goal of ranking should not be to create composite quality indicators that provide a numerical ranking from the best to the worst. Therefore, the members of the QUALITYWATCH project consortium recommend the following:

(-) To guide the development of the national database based on the following comprehension of quality: that its goal is the analysis and comparison of data that can facilitate various kinds of decision-making in higher education.

The responsibility for creating the national database should be entrusted to one of the institutions already involved in the collection and processing of data on the quality of higher education. Since the Croatian Agency for Science and Higher Education (ASHE) already collects a large amount of data on various dimensions of quality of higher education, we suggest to consider that this agency be responsible for developing and maintaining such a national database. Alternatively, it is possible that one of the relevant state institutions of higher education subcontract this task to an external contractor that has expertise in this area.

85 A possible list of competent institutions that should be provided with greater coordination is given in Table 1 in the column Competent institutions.
Table 14. contains a suggestion of possible quality indicators that could be included in the database, based on the analysis that we have described in the third chapter of this document. The table shows that a large amount of data already exists for most of these quality indicators. The table also identifies competent institutions that may be involved in the collection of the data that is not yet available. Since the development of the proposed national database is comprehensive and demanding, we have also included suggestions about the importance of individual quality indicators in Table 14. The indicators whose importance is labelled “very important” should have priority during data collection and entry of the data into the database, while those labelled “important” could be included in the database at a later stage. This would enable the gradual development (and gradual entry of data into) the database. The members of the QUALITYWATCH project consortium therefore recommend the following:

TO CONSIDER THE INCLUSION OF INFORMATION AND DATA IN THE NATIONAL DATABASE THAT RELATES TO THE FOLLOWING 10 QUALITY DIMENSIONS DEVELOPED WITHIN THE FRAMEWORK OF THE QUALITYWATCH PROJECT:

1. Teaching, learning and assessment of knowledge and skills
2. Financial aspects of studying and the availability of financial support systems
3. Support services and the institution’s cost per student
4. Study outcomes, employment and connection with the labour market
5. Quality of the teaching staff
6. Research activities, linking research and teaching activities, and knowledge transfer
7. International orientation
8. Social dimension of higher education
9. Contribution to the community
10. Outcomes of quality assurance procedures

Table 14. Proposal of possible quality indicators to incorporate into the Croatian national database, including an overview of the indicators’ current availability, the competent institutions and an assessment of the level of importance of each indicator

<table>
<thead>
<tr>
<th>Dimensions and quality indicators</th>
<th>Availability of data (Yes/No/Partially)</th>
<th>Competent institution (Type of institution/website)</th>
<th>Proposal of importance (Important/Very important)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching, learning and assessment of knowledge and skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure and organisation of the study programme</td>
<td>Yes</td>
<td>Higher education institutions</td>
<td>Very important</td>
</tr>
<tr>
<td>Organisation of the assessment of knowledge and skills</td>
<td>Yes</td>
<td>Higher education institutions</td>
<td>Very important</td>
</tr>
<tr>
<td>Time needed for teaching and learning</td>
<td>Yes</td>
<td>MSE-Eurostudent</td>
<td>Important</td>
</tr>
<tr>
<td>Student-teaching staff ratio</td>
<td>No</td>
<td>ASHE, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Availability of the teaching staff and mentoring assistance</td>
<td>Partially</td>
<td>Higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>-----------</td>
<td>-------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Adequacy of facilities for teaching and learning</td>
<td>Yes</td>
<td>ASHE, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Availability of learning resources</td>
<td>Yes</td>
<td>ASHE, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Assessment of the teaching process through student surveys</td>
<td>No</td>
<td>Higher education institutions, MSE-Eurostudent</td>
<td>Very important</td>
</tr>
</tbody>
</table>

| Financial aspects of studying and the availability of financial support systems |
|---------------------------------------------------------------|-----------------|-------------------------------|-----------|
| Average overall cost of study (cost of tuition/registration fees and living expenses) | Yes | MSE-Eurostudent, IDE, Studij.hr, higher education institutions | Very important |
| Financial support for students                               | Yes | Stipendije.info, MSE, higher education institutions | Very important |
| Availability of various types of student accommodation       | Partially | Higher education institutions | Very important |

| Support services and the institution’s cost per student       |
|---------------------------------------------------------------|-----------|-------------------------------|-----------|
| Student counselling (including learning assistance, legal and psychological assistance, assistance for under-represented and disadvantaged student groups) | Yes | Higher education institutions | Important |
| Career centres                                               | Yes       | Higher education institutions, CES | Important |
| Offices for international cooperation                        | Yes       | Higher education institutions | Important |
| Student self-organisation and representation programmes       | Yes       | Higher education institutions | Important |
| Student satisfaction with administrative services             | No        | Higher education institutions | Very important |
| Institution’s cost per student                               | No        | Higher education institutions | Important |

| Study outcomes, employment and connection with the labour market |
|-----------------------------------------------------------------|-----------|-------------------------------|-----------|
| Study completion rate                                           | No        | Higher education institutions | Important |
| Drop-out rate                                                   | No        | Higher education institutions | Important |
| Average time needed to graduate at each of the three levels of study | Partially | Higher education institutions | Important |
| Proportion of those who further pursue their studies at other levels | Partially | MSE-Eurostudent, Higher education institutions | Important |
| Employment prospects after graduation                           | Partially | Studij.hr, CES, CroQF web portal, CroQF registry, ASHE, higher education institutions | Very important |
| Type of institutions and sectors in which graduates gain employment | No | CES, CroQF web portal, CroQF registry, ASHE, higher education institutions | Very important |
| Salary expectation after graduation | No | CES, CroQF web portal, CroQF registry, ASHE, higher education institutions | Very important |
| Relevance of the learning outcomes of a study programme in the workplace | No | CES, CroQF web portal, CroQF registry, ASHE, higher education institutions | Very important |

**Quality of the teaching staff**

| Domestic and international awards and teacher awards | No | Higher education institutions | Important |
| Student satisfaction with the teaching staff, as measured by student surveys | Partially | Higher education institutions | Very important |
| Number of teaching staff holding a doctorate degree, especially a doctorate degree acquired outside of the home institution or abroad | Partially | Higher education institutions, ASHE, CBS | Important |
| Number of projects implemented in cooperation with the local community, civil society organisations or with industry, and number of implemented projects financed by the EU | No | Higher education institutions | Important |
| Quality of research and publications in the form of citations in relevant scientific journals and databases | Partially | Higher education institutions, CBS | Important |
| Use of research findings and publications in the teaching process (among others, the inclusion of publications in course reading lists and linking practical instruction with research results) | No | Higher education institutions | Important |

**Research activities, linking research and teaching activities, and knowledge transfer**

<p>| Quality of research in the form of citations in relevant scientific journals and databases | Yes | CBS, ASHE, Higher education institutions | Important |
| Publishing frequency and types of publications | Partially | CBS, ASHE, Higher education institutions | Important |
| Inclusion of own publications (or publications related to the parent higher education institution) in course reading lists | Partially | Higher education institutions | Important |
| Number of (externally funded) research projects under implementation and generated income | Partially | CBS, Higher education institutions | Important |
| Number of patents | Yes | CBS | Important |
| Number of spin-off companies established by the higher education institution | No | CBS, Higher education institutions | Important |</p>
<table>
<thead>
<tr>
<th></th>
<th>Yes/No</th>
<th>Source(s)</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of post-doctoral positions</td>
<td>Yes</td>
<td>CBS, Higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Study programmes available in foreign languages at all three levels of study</td>
<td>Yes</td>
<td>Higher education institutions, Study in Croatia web portal, ASHE</td>
<td>Important</td>
</tr>
<tr>
<td>International mobility of students, teaching staff and non-teaching staff</td>
<td>Partially</td>
<td>AMEUP, higher education institutions, MSE-Eurostudent</td>
<td>Important</td>
</tr>
<tr>
<td>Number of publications published in cooperation with foreign researchers in foreign publications</td>
<td>No</td>
<td>Higher education institutions, CBS</td>
<td>Important</td>
</tr>
<tr>
<td>Number of doctorates awarded to foreign students</td>
<td>No</td>
<td>Higher education institutions, MSE</td>
<td>Important</td>
</tr>
<tr>
<td>Number of international students</td>
<td>Partially</td>
<td>AMEUP, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Number of foreign employees in the higher education institution</td>
<td>No</td>
<td>Higher education institutions, MSE</td>
<td>Important</td>
</tr>
<tr>
<td>Percentage of students whose parents have completed primary/secondary/tertiary education</td>
<td>Partially</td>
<td>MSE-Eurostudent, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Percentage of students from families of lower socioeconomic status</td>
<td>Partially</td>
<td>MSE-Eurostudent, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Percentage of students enrolled after the age of 25</td>
<td>Partially</td>
<td>MSE-Eurostudent, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Percentage of students with children</td>
<td>Partially</td>
<td>MSE-Eurostudent, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Percentage of students with disabilities</td>
<td>Partially</td>
<td>MSE-Eurostudent, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Percentage of students who work while studying</td>
<td>Partially</td>
<td>MSE-Eurostudent, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Percentage of students who travel to study</td>
<td>Partially</td>
<td>MSE-Eurostudent, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Percentage of students who are members of national minorities</td>
<td>Partially</td>
<td>MSE-Eurostudent, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Number of graduates employed in the local community</td>
<td>No</td>
<td>CES, CroQF web portal, ASHE, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Number of internships realised in the local community</td>
<td>No</td>
<td>Higher education institutions, MLPS, CES</td>
<td>Important</td>
</tr>
<tr>
<td>Number of cooperation agreements concluded with civil society organisations in the local community</td>
<td>No</td>
<td>Higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Number of projects that the higher education institution realised in partnership with local government units</td>
<td>No</td>
<td>Higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Number of students who participate in volunteer programmes in local organisations</td>
<td>No</td>
<td>Higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Number of courses implemented in cooperation with organisations from the local community. This form of cooperation provides the possibility of achieving the learning outcomes of a study programme by utilising a model of learning through commitment to the community.</td>
<td>No</td>
<td>Higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Revenues from local sources</td>
<td>No</td>
<td>Higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Publishing in cooperation with individuals from the local community</td>
<td>No</td>
<td>Higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td><strong>Outcomes of quality assurance procedures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expert committee reports with outcome evaluations conducted at higher education institutions</td>
<td>Yes</td>
<td>ASHE, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Recommendations and final decisions related to the outcome of the most important evaluation procedures, such as (re)accreditation and audit</td>
<td>Partially</td>
<td>ASHE, MSE, higher education institutions</td>
<td>Important</td>
</tr>
<tr>
<td>Summaries and analyses of the results of external and internal evaluations in the higher education system</td>
<td>Partially</td>
<td>ASHE, higher education institutions</td>
<td>Important</td>
</tr>
</tbody>
</table>
6. Recommendations for Improving the Transparency of Quality Assurance for Higher Education Policy Makers and Decision Makers at Higher Education Institutions

NINOSLAV ŠČUKANEC, RIA BILIĆ, NIKOLINA SVALINA, SLOBODAN ŠKOPELJA
6. Recommendations for Improving the Transparency of Quality Assurance for Higher Education Policy Makers and Decision Makers at Higher Education Institutions

Ninoslav Šćukanec, Ria Bilić, Nikolina Svalina, Slobodan Škobelja
6.1. Introduction

The document „Recommendations for Improving the Transparency of Quality Assurance for Higher Education Policy Makers and Decision Makers at Higher Education Institutions“ compiles the recommendations which are based on the conclusions and results of the research conducted as part of the project “QUALITYWATCH: Croatian Higher Education Quality Watchdog”\(^{86}\). This project recognizes and appreciates the great effort invested in launching the Croatian quality assurance system in higher education, particularly since the passing of the Act on Quality Assurance in Science and Higher Education in 2009.\(^ {87}\) Since then, Croatia has been systematically applying the European standards and guidelines for quality assurance in the European Higher Education Area (ESG)\(^ {88}\).

These recommendations are intended for higher education policy makers and decision makers at higher education institutions. By publishing them, we want to encourage all higher education institutions in Croatia as well as competent public authorities to improve the transparency of quality assurance data. The recommendations listed below are divided into three parts: the first part concerns the external national quality assurance system, the second part concerns internal quality assurance systems at higher education institutions, whilst the third part focuses on establishing a national database on quality assurance in higher education.

Greater transparency of data on the quality of higher education institutions can be useful to different stakeholders of higher education. On the one hand, it can provide a better understanding of various aspects of individual institutions’ quality to the aforementioned education policy makers, leaders of higher education institutions, researchers, teachers and staff. On the other hand, it can help students and their parents choose which higher education institution and study programme to enrol into or which programme to continue pursuing at higher levels, and can also contribute to ensuring a successful completion of a current study programme.

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86, More information on the project and project publications is available on the project’s webpage: http://www.ipa-qualitywatch.eu/.
88, More information on the ESG can be found on the webpage of the European Association for Quality Assurance in Higher Education (ENQA) at http://www.enqa.eu/index.php/home/esg/.
6.2. Recommendations for improving the transparency of external quality assurance

ALL DOCUMENTS AND DATA RESULTING FROM THE RE-ACCREDITATION OF HIGHER EDUCATION INSTITUTIONS SHOULD BE PUBLISHED ON THE WEBSITE OF THE AGENCY FOR SCIENCE AND HIGHER EDUCATION (ASHE).

ASHE has adopted the good practice of publishing the largest number of documents resulting from the re-accreditation of higher education institutions on its website. The following documents and data used in re-accreditation are currently not publicly available on ASHE’s website:

- Higher education institutions’ self-evaluation reports,
- MOZVAG’s quantitative data regarding different aspects of the quality of higher education institutions and their study programmes.

Since these documents and data exist, we recommend making them publicly accessible in order to ensure the availability of all information on which final decisions related to this quality assurance procedure are based.

ALL DOCUMENTS AND DATA RESULTING FROM THE RE-ACCREDITATION, AUDIT AND OTHER EXTERNAL EVALUATION PROCEDURES UNDERWENT BY HIGHER EDUCATION INSTITUTIONS SHOULD BE PUBLISHED ON HIGHER EDUCATION INSTITUTIONS’ WEBSITES.

In addition to publishing these documents on the website of the authorized national external quality assurance agency (ASHE), we recommend that each higher education institution also publishes all documentation relating to external quality assurance procedures it underwent on its own website. This especially pertains to information, data and documents related to re-accreditation: the higher education institution’s self-evaluation report, the final report of the expert committee that visited the institution, the quantitative data on the various aspects of the quality of the higher education institution and its study programmes, ASHE’s accreditation recommendation, the higher education institution’s response to the expert committee’s report and the Minister's decision.

Apart from the fact that these data and documents should be readily available on higher education institutions websites, it is also important that higher education institutions publish summaries of the key aspects and indicators of quality - these summaries would enable a quicker review and allow a wider group of stakeholders, who might not be familiar with internal and external quality assurance processes, to understand key findings. Anyone looking for information about enrolling into a higher education institution or successfully completing a study programme they embarked on will first look to a particular higher education institution’s website for the information about the institution’s quality - that is why it is important that the higher education institutions’ websites contain clear information and data on the quality of the institution and its programmes.

THE MINISTER OF SCIENCE AND EDUCATION’S FINAL DECISIONS ON THE OUTCOMES OF THE RE-ACCREDITATION PROCEDURES UNDERWENT BY HIGHER EDUCATION INSTITUTIONS SHOULD BE PUBLISHED ON ASHE’S AND THE MINISTRY OF SCIENCE AND EDUCATION’S WEBSITES.

As the Minister of Science and Education makes the final decision on the outcome of the re-accreditation procedure underwent by a higher education institution (by issuing or withholding a licence, or by issuing a
letter of expectation), it is important for this final decision to be publicly disclosed - it represents the final outcome and completion of this procedure’s implementation. These final decisions are presently not published anywhere so there is also no publicly available information about the final outcomes of re-accreditation procedures. We recommend that these decisions, alongside other re-accreditation documents, be published on ASHE’s and the Ministry’s websites.

The evaluation process within the re-accreditation and audit procedures should be improved through further elaboration of evaluation criteria thus ensuring a more accurate assessment of quality and a rating that is more coherent.

The reports on three Croatian counties drawn up as part of the QUALITYWATCH project show that higher education institutions in all three counties received high re-accreditation and audit ratings and that there was a relatively level of variability among ratings received for different quality standards. This does not imply that the ratings awarded in the first round of re-accreditation in Croatia (2010-2015) were unfounded, but indicates that there is a need to additionally improve the criteria of evaluations conducted by members of expert committees. Evaluation criteria should enable clearer and more transparent grading when assessing the quality of individual standards and greater consistency between the assigned ratings and their written explanations.

The expert committees’ ratings of individual quality standards, the descriptive assessments of individual quality standards included in the expert committees’ reports and the conclusions of the accreditation recommendations should be harmonized and made more consistent.

In addition to the descriptive assessments of individual quality standards, the expert committees’ reports produced during re-accreditations of higher education institutions should also include the ratings of those quality standards. These are publicly visible only at a later stage of the re-accreditation process, i.e. they are only featured in the accreditation recommendation. Sometimes the contents of the descriptive assessments of individual quality standards included in the expert committees’ reports stand in opposition to or do not match the ratings assigned for the same standards. Therefore the conclusions of individual accreditation recommendations sometimes are not fully in line with the assigned ratings or the descriptive assessments of quality standards featured in the expert committees’ reports.

The analysis of all available re-accreditation documentation of certain higher education institutions shows that some higher education institutions received high ratings for the majority of quality standards, but they also received accreditation recommendations that recommended that the institutions be issued a letter of expectation. For that reason this practice should be improved to achieve consistency between all publicly available parameters (the descriptive assessments of quality standards, the ratings of quality standards, the conclusions of accreditation recommendations) based on which decisions are made. As a result, the final decisions concerning re-accreditation procedures, contained in accreditation recommendations, will be clearer and more credible.

It should be ensured that the stakeholders who are not familiar with all the elements of the national system of quality assurance have a better understanding of the outcomes of re-accreditation and audit procedures. A single national database for higher education quality

89, Croatian Minister of Science and Education reaches the final decision on the outcome of higher education institutions' re-accreditation procedures based on ASHE’s accreditation recommendations.
ASSURANCE AND ENHANCEMENT, SEARCHABLE BY VARIOUS QUALITY INDICATORS THAT USERS CAN SELECT, SHOULD BE LAUNCHED.

Since the external quality assurance procedures carried out at higher education institutions, such as re-accreditations and audits, result in collecting a large amount of information and data which can enable stronger evidence-based decision-making in higher education, students, their parents, teachers, assistants in primary and secondary schools and the wider interested public must be provided with the way to better understand the key outcomes of these procedures. One should not expect these stakeholders to be fully familiar with all the elements pertaining to aforementioned procedures. Therefore, the main results of these procedures should be displayed in an easily understandable format. A positive step toward that has already been made on ASHE’s website and on the Studij.hr website where summaries related to re-accreditation procedures have been published.

In order to further improve the transparency, accessibility and legibility of collected information and data, we propose that authorities consider launching a single national database that would contain all the information, data and documents related to quality assurance and enhancement in higher education in Croatia. Such a database should be tailored to meet the needs of its users, which can be achieved by allowing users to search the database by selecting specific quality indicators. This approach to creating a database would involve selecting key information and data among those collected through the re-accreditation and audit processes and defining a number of key quality indicators which should be represented through narrative explanations and graphs. This database should allow users to compare multiple selected universities or study programmes based on specific selected indicators.

We believe that such a national database would allow for a better use of the information and data collected through external quality assurance procedures and a better understanding of quality in higher education, while helping different stakeholders to make more informed decisions when it comes to the quality of individual higher education institutions and their study programmes.

6.3. Recommendations for improving the transparency of internal quality assurance

INFORMATION ABOUT THE ORGANISATION OF THE INTERNAL QUALITY ASSURANCE SYSTEM AND A LIST OF COMPETENT AUTHORITIES AND THEIR FUNCTIONS SHOULD BE PUBLISHED ON THE WEBSITES OF ALL HIGHER EDUCATION INSTITUTIONS IN CROATIA.

It is important that all interested stakeholders can quickly and easily find information on how the internal quality assurance system of every Croatian higher education institution is structured. The lists of competent authorities with an explanation of their tasks and lists of members or employees of these bodies, including their contact information, should be readily available on the websites of all higher education institutions in Croatia.

ALL INTERNAL DOCUMENTS REGULATING INTERNAL QUALITY ASSURANCE SYSTEMS SHOULD BE PUBLISHED ON THE WEBSITES OF ALL HIGHER EDUCATION INSTITUTIONS.

It is important that all interested stakeholders can quickly and easily access all of the documents that regulate internal quality assurance at higher education institutions. Therefore, we recommend that these documents

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90 More recommendations regarding the national database can be found in the final chapter of these policy recommendations.
be clearly singled out in separate sections of higher education institutions’ websites. We suggest that higher education institutions do not publish internal quality assurance documents on the pages that contain all other documents that govern various aspects of their activities as this might make it more difficult to find and access documents on internal quality.

ALL DOCUMENTS AND DATA RESULTING FROM THE RE-ACCREDITATION, AUDIT AND OTHER EXTERNAL EVALUATION PROCEDURES UNDERWENT BY HIGHER EDUCATION INSTITUTIONS SHOULD BE PUBLISHED ON HIGHER EDUCATION INSTITUTIONS’ WEBSITES.

This recommendation has already been explained in detail in the previous chapter which contains the recommendations for improving the transparency of the external quality assurance system.

SUMMARIES AND ANALYSES OF STUDENT SURVEYS FOR EACH ACADEMIC YEAR IN WHICH SURVEYS WERE CONDUCTED SHOULD BE PUBLISHED ON HIGHER EDUCATION INSTITUTIONS’ WEBSITES.

Although most higher education institutions regularly carry out various forms of student surveys on the quality of studying, the results of these surveys are for the most part not publicly available. Unless students are given clear information on the outcomes of these surveys and specific procedures which improve the quality of a higher education institution based on their results, it is very likely that they will not be willing to participate in surveys because they will not consider them to be a useful instrument for improving the quality of the higher education institution. It is therefore important to publish summary results of the surveys and inform students, teachers and non-teaching staff about the measures that the higher education institution undertook to improve quality based on the recommendations and comments from student surveys.

6.4. Recommendations for the launch of a Croatian national database for quality assurance and quality enhancement in higher education

IN ORDER TO INCREASE THE TRANSPARENCY AND INTEGRATION OF DATA ON THE QUALITY OF HIGHER EDUCATION, WE RECOMMEND THAT A SINGLE NATIONAL DATABASE FOR QUALITY ASSURANCE AND QUALITY ENHANCEMENT IN HIGHER EDUCATION IN CROATIA BE LAUNCHED. THE AUTHORS RECOMMEND:

1. To define strategic objectives for data collection in higher education, especially for data on the quality of higher education;
2. To integrate data on the quality of higher education by ensuring the coordination of competent authorities in the process of defining the types of data to be collected in the process of collecting data. This would avoid duplicating activities;
3. To include as much publicly available data as possible in the national database in order to reduce data collection via additional questionnaires.

The feasibility study for the launch of a national database, developed as part of the QUALITYWATCH project, shows that there is a large number of different national databases and a lot of research as well as a large number of institutions tasked with collecting data on the quality of higher education in Croatia which are not mutually connected. That might be the reason activities are duplicated and resources are wasted in data collection, while final outcomes do not produce desired effects. There is a lack of an integrated data management system
and clear strategic goals that would be achieved by collecting data on the quality of higher education. Therefore, the results, collected information and data are not sufficiently accessible to stakeholders who should be their target group. Accepting the recommendations listed herein could result in removing these obstacles.

TO ADJUST THE CONTENT, STRUCTURE AND LAYOUT OF THE NATIONAL DATABASE TO DIVERSE TYPES OF TARGET USERS WHO WILL BE ABLE TO INDEPENDENTLY CHOOSE WHICH QUALITY INDICATORS WILL PROVIDE THE BASIS FOR SEARCHING AND ANALYSING THE DATABASE.

(·) To guide the development of the national database based on the following comprehension of quality: that its goal is the analysis and comparison of data that can facilitate various kinds of decision-making in higher education.

We recommend that the national database be aimed at diverse types of users. On the one hand, the database should be aimed at higher education policy makers, senior civil servants, management staff at higher education institutions, teaching staff and researchers. On the other hand, it should also meet the needs of high-school seniors, their teachers and parents, and those students planning to continue their studies at a higher level (second or third level studies). Since we suggest that such a national database be aimed at heterogeneous target groups, it is important to tailor the structure and layout of the database to meet the needs of these groups. U-Multirank and UNISTATS\textsuperscript{91} are good examples of the similar international databases.

Users should be able to independently choose various quality indicators based on which they could search the database, carry out comparative analyses and create possible rankings of study programmes or higher education institutions. If the goal is to offer a certain type of ranking, it should arise from an understanding of quality as being primarily aimed at providing data analyses and various types of comparisons that can facilitate decision-making in higher education. The goal of creating rankings should not be to create composite quality indicators that would allow ranking higher education institutions on a numbered list of best to worst. In addition, modern technological solutions and design that will encourage the use of the database and make information transparent and easily accessible will need to be employed.

THE INCLUSION OF INFORMATION AND DATA CONCERNING THE TEN DIMENSIONS OF QUALITY, PROPOSED IN THE QUALITYWATCH PROJECT’S PUBLICATION ENTITLED FEASIBILITY STUDY FOR THE LAUNCH OF A NATIONAL DATABASE FOR QUALITY ASSURANCE AND QUALITY ENHANCEMENT IN HIGHER EDUCATION, IN THE NATIONAL DATABASE SHOULD BE CONSIDERED:

(1) Learning, teaching and the assessment of knowledge and skills
(2) Financial aspects of studying and the availability of financial support systems
(3) Support services and the institution’s cost per student
(4) Study outcomes, employment and connection with the labour market
(5) Quality of the teaching staff
(6) Research activities, linking research and teaching activities, and knowledge transfer
(7) International orientation
(8) Social dimension of higher education
(9) Contribution to the community
(10) Outcomes of quality assurance procedures

\textsuperscript{91} Aforementioned databases are described in detail in the chapter/publication Feasibility Study on the Launch of a National Database for Securing and Enhancing of Quality in Higher Education, and are available at http://www.umultirank.org/#!/home and https://unistats.direct.gov.uk/.
After analysing different foreign databases for enhancing the quality of higher education, the QUALITYWATCH project team discovered that the majority of quality indicators found in such databases can be grouped into ten categories or dimensions of quality that cover different aspects of higher education. The aforementioned feasibility study contains a list of quality indicators that can be included in each of the mentioned ten dimensions of quality. All QUALITYWATCH project publications are available on the project’s website at http://www.ipa-qualitywatch.eu/.
APPENDIX I. Teaching and learning in the context of quality assurance in higher education

Dr. sc. Marko Turk, Faculty of Humanities and Social Sciences, University of Rijeka

Over the past two decades, the quality of higher education has become an indispensable subject of numerous research studies, policy documents and discussions both on the international and the national level. In the process, quality assurance played a special role in shaping the common European higher education area, becoming one of the highly ranked priorities at all levels. In this context, numerous policy recommendations for improving quality assurance in higher education were put forward, quality assurance standards and guidelines were developed and defined, ministerial communiqués were published, and new institutional practices for creating quality were defined, developed and evaluated. All this resulted in numerous changes for higher education and its stakeholders - from education policy makers and higher education institutions' managers to various daily practices of university teachers and students. In the process, the quality of higher education teaching, and consequently the quality of learning and instruction in higher education, were placed high on the list of priorities in the area of improving higher education.

In the national environment, realizations about the strategically important role of higher education teaching for achieving quality in higher education encouraged a number of research studies and initiatives which aimed to identify the criteria of quality teaching that, from today's perspective, have been present for many years (Ledić 1992, 1993, 1994; Ledić, Kovač, Rafajac 1998; Kovač, Ledić, Rafajac 1998; Kovač 2001). However, intense discussions of these topics in relation to education policies in Croatia were particularly stimulated by the conference of ministers in charge of higher education held in Prague in 2001, i.e., by the publication of the conference's resolutions.

92 It should be noted that the notion of the quality of higher education teaching began developing even earlier in the research circles. Chickering and Gamson (1987) thus offer seven principles for good practice in undergraduate education, which are: encouragement of contact between students and faculty; development of reciprocity and cooperation among students; encouragement of active learning; giving prompt feedback; emphasizing time on task; communication of high expectations; respect towards diverse talents and ways of learning. Similar to that, Gibbs (1995, 13) replies to the question „What is quality teaching?“ by offering a definition based on the results of researching student learning: „Quality teaching is teaching that helps students during learning, that does not encourage a superficial approach to learning, but enables an active relationship with the teaching material and stimulates learning motivation, desire for understanding, persistence, independence, respect towards truth and desire for further learning.”
so-called Prague declaration (Towards the European Higher Education Area: Communiqué of the meeting of European Ministers in charge of Higher Education in Prague on May 19th 2001); by signing it, Croatia uniformly entered the Bologna process and became part of the European higher education area. Since 2001, numerous mechanisms of quality assurance in higher education have been developed. It is worth noting that the establishing of the Agency for Science and Higher Education (ASHE) played an important role in this process, as did the numerous Tempus and Cards projects93 that were focused on improving quality assurance in higher education. Based on the Tempus projects, the Agency of Science and Higher Education’s policy and individual university strategies, quality assurance offices were established at Croatian higher education institutions, national quality assurance standards and mechanisms were developed, and a quality culture in higher education, harmonized with European standards and guidelines, was created.

In the effort to build a quality culture, the development of the culture of higher education learning and instruction quality played a special role. More precisely, it included active involvement of key stakeholders and/or “mechanisms” for developing the culture of higher education learning and instruction quality – university teachers and students. In the national environment this implied (and one could argue that it continues to imply): 1) changing the professional modus operandi of university teachers and 2) developing awareness of the students’ active role in designing and evaluating the educational process.94

**Changing the professional modus operandi of university teachers.** Although this statement may seem a bit pretentious, there is a clear line of reasoning that leads to this conclusion. In his discussion on the criteria of the academic quality culture, Marentič Požarnik (2009) distinguishes: 1) a quality culture of academic research, and 2) a quality culture of higher education teaching and academic learning and instruction. In doing so, the author points out that the quality culture of higher education primarily means caring about and investing in the development of teaching competencies of higher education teachers as the main creators and mechanisms of the learning and instruction process in higher education. In addition, this understanding of quality culture in higher education teaching is present in the projects and documents of European national educational policies as well as more recent national ones. For example, the final report of the Tuning Educational Structures in Europe project points out that: “Since traditionally universities have conceived their task as limited to the elaboration and transfer of disciplinary knowledge, it is not surprising that many academics are not used to considering the issues of teaching/learning methods and are not familiar with (or even diffident towards) the vocabulary and the conceptual framework used to describe and classify those methods”, while the European Association for Quality Assurance in Higher Education (ENQA), in its guidelines for establishing national external quality assurance systems, states that: “Institutions should have ways of satisfying themselves that staff involved with teaching of students are qualified and competent to do so,” (ENQA, 2007) and furthermore that: “…institutions should ensure that their staff recruitment and appointment procedures includes a means of making certain that all new staff have at least the minimum necessary level of competence.” In addition, OECD’s Fostering Quality Teaching in higher Education: Policies and Practices (2012) report, besides putting a strong emphasis on the need for developing the teaching competencies of university teach-

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93. One particular Tempus projects should be emphasized here: specifically, the SCM Cro4 Bologna project, which was implemented by the University of Zagreb in partnership with the Ministry of Science and Education of the Republic of Croatia, all Croatian higher education institutions and partners from Austria, Czech Republic and Italy. More information about the project can be found at [http://www.unizg.hr/tempusprojects/Cro4Bologna/seminars.htm](http://www.unizg.hr/tempusprojects/Cro4Bologna/seminars.htm).

94. Arguments for these assumptions are to be found in the results of previous research of the quality of higher education teaching in Croatia (Ledić, 1993; Ledić, Kovač, Rafajac, 1998), and they indicate numerous deficiencies in the quality of instruction and learning in higher education. The results of research conducted as part of the project “Assumptions of Quality Assurance in Higher Education,” financed through the Ministry of Science and Education’ project scheme, suggest that higher education teachers mostly do not show the need for improving their teaching skills, despite the fact that the majority do not possess even elementary knowledge of contemporary higher education teaching methods. In the majority of cases, the teaching is traditional; university teachers mostly reproduce the experience from their own training and have no information about more effective teaching methods. On the other hand, students showed deep dissatisfaction with the quality of teaching.
ers, advises higher education institutions, primarily universities, of the need to develop university teacher training and certification programmes in the area of higher education teaching. European Commission goes one step further: in its report *Improving the quality of teaching and learning in Europe’s higher education institutions* (2013), as one of the recommendations for necessary modernization and improvement of higher education by 2020 it emphasizes that teaching staff at higher education institutions should complete a professional pedagogical training programme for working in higher education by 2020. In accordance with this, the report points out that the continuous professional training and the acquisition of teaching competencies should become a professional *sine qua non* for all employees in higher education. In the national environment, the role and importance of teaching in higher education is emphasized through the Education, Science and Technology Strategy (2013), in which teaching and educational activities are highlighted as one of the four main segments of higher education in Croatia. However, national surveys of higher education and the academic profession (Ledić, 2009; Turk and Ledić 2016a, 2016b) indicate significant differences in the evaluation of higher education teaching and research activities in Croatia. Although we have the European framework and guidelines, as well as the national strategic documents of a more recent date, the legislation that governs the status and position of university teachers in Croatia – one of the main mechanisms for developing the quality culture teaching – does not recognize the quality culture of academic instruction and learning as equal to the culture of academic research (Turk and Ledić, 2016a). Scientific activities continue to be dominantly valued in the national academic community (Turk, 2016); consequently, to discuss the quality culture learning and instruction, as the basic processes of higher education teaching, primarily means striving for the harmonization of national legislation with European and national education policy guidelines and strategic documents. In this matter, what is extremely important are strong affirmative currents based on the results of empirical research (Kovač, 2001; Vizek Vidović, 2009; Turk and Ledić, 2016a; Rončević, Turk and Vignjević, 2016), which will point to and advocate for not only raising awareness of the need to develop quality culture, but also lead to changes in the national higher education legislation.

**Raising awareness about the students’ active role in the creation and evaluation of the teaching process.** Student evaluation of university teaching is a widespread activity at universities all around the world; its results are taken into consideration when assessing the quality of teaching and frequently also when promoting university teachers. Researchers agree that student evaluations constitute a valid and reliable component of the multi-dimensional image of university teaching efficiency (Marsh, 1987, Tang, 1997). It is clear that student evaluations have their limitations (Cox, 1994); however, awareness of their active role in creating and evaluating the teaching process is an extremely important mechanism in creating a quality culture of academic learning and instruction. In this matter, it is necessary to keep in mind that students cannot reliably evaluate all aspects of teaching: one should take into account their subjectivity and numerous elements that may affect their evaluation (academic discipline they belong to, their academic standing, the size of the group, personality traits, etc.); as a result, efforts are being made to develop approaches to the evaluation of teaching that will be more efficient and responsive and will not rely solely on student evaluations (Timpson and Andrew, D., 1997). Across the world, there are numerous instruments that students use for evaluating teaching. For example, CEQ (*Course experience Questionnaire*) is used in the national annual survey of all graduates in Australia, and it is used in the UK as well. German universities developed and use HILVE (*Heidelberger Inventar zur Lehrveranstaltungssevaluation*). In medical teaching in which, especially in the United States, high standards of accreditation are required, numerous instruments that evaluate the performance of certain forms of teaching are in use, for instance CLC (*Course, Library, and Computer*), CLIN (*Clinical*), NSL (*Nursing Skills Lab*).

In Croatia, the awareness of the importance of student perspective as an important mechanism in creating a culture of learning and instruction in higher education began to develop simultaneously with the introduction of the Bologna process and more vocal advocating for the affirmation of the quality culture. Although teachers are still perceived as the key stakeholders responsible for the quality of support they provide to their students, the voice of the students must be heard (Bezinović and Bajšanski, 2007). Higher education institutions are
there for them. Their academic experience and engagement in learning must be permanently monitored and used as the system's vital corrective elements. Taking full responsibility for one’s actions and progress is each individual’s task at higher education institutions, whilst one of the important tasks of the quality assurance system is to provide support to all participants to advance in their education. In this context, students should be seen as active stakeholders in the process of building a quality culture, and should be actively included in all major activities of higher education institutions.

Although the perception of the student role in Croatia’s higher education has changed significantly in the last ten years, owing to student representatives’ proactive actions, higher education institutions’ growing awareness of their importance, and occasionally also the need for harmonization with European standards and directives, there are still certain challenges in this segment of higher education quality assurance. This primarily refers to student evaluation processes where the need for improving student questionnaires is particularly emphasized: which would be achieved by increasing sample sizes and encouraging students to responsibly participate in the shaping of study programmes.

The functionality of the monitoring system is criticized due to the fact that it is not mandatory to fill out the student questionnaire at most higher education institutions, which is why samples are usually too small to be useful. Also, it is specifically highlighted that students are still not sufficiently aware of the importance attached to their feedback. On the other hand, student bodies warn that the connection between changes in higher education teaching and the results of student evaluations should be clearly outlined, which has not been sufficiently emphasized so far.

In conclusion, it should be noted that the culture of higher education learning and instruction quality is a process which, both when it comes to European and national education policies, and when it comes to managing higher education institutions, has its own evolutionary process which is being built and developed. In the Croatian context, this process started during the last two decades; there is, however, still a considerable developmental path ahead of it. In regards to that, it is worth pointing out that quality assurance and enhancement do not consist solely of a collection of protocols, standards and regulations. It will come to life when the majority of this process’ stakeholders recognize the importance of quality and begin implementing it in daily interactions with their professional environment. In this context, it is evident that university teachers and students are the main actors of creating and ensuring the quality of higher education learning and instruction.
Dear Ms/Mr,

Thank you for taking part in this research. More information on what we are doing as part of this project activity and why we are asking you to provide certain information can be found in the Guide to Monitoring the Transparency of Quality Assurance in Higher Education, provided in the attachment.

Thank you for your time and effort!

QUALITYWATCH project team

* Required questions

I. BASIC INFORMATION ABOUT THE HIGHER EDUCATION INSTITUTION

(1) Name of the higher education institution: *

_________________________________________________________________________________

(2) Type of the higher education institution: *

☐ University Faculty/Academy
☐ University of applied sciences
☐ University colleges of applied sciences
(3) Type of ownership of the higher education institution: *

- Public
- Private

(4) Type of study programmes implemented by the higher education institution: *

- Professional study programmes
- University and professional study programmes

(5) Name of the contact person: *
The person who fills in the questionnaire and can be contacted by phone or e-mail in case further clarification of responses is required

_________________________________________________________________________________

(6) Job function/s of the contact person: *

_________________________________________________________________________________

(7) Phone number of the contact person: *

_________________________________________________________________________________

(8) E-mail of the contact person:

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II. THE TRANSPARENCY OF EXTERNAL QUALITY ASSURANCE PROCEDURES

Re-accreditation

(9) Did your higher education institution go through the re-accreditation procedure? *

- Yes
- No
- Other:

(10) In which year did your higher education institution go through the re-accreditation procedure?

- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
(11) Have you made the SELF-EVALUATION REPORT, which resulted from the re-accreditation procedure, publicly accessible on the official website of your higher education institution? *

☐ Yes
☐ No

(12) In case the aforementioned document (self-evaluation report) is available online, please provide the link to it below.

_________________________________________________________________________________

(13) In case the aforementioned document (self-evaluation report) is not available online, do you plan on making it publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

☐ Yes
☐ No
☐ Other:

(14) Please, explain why you plan/do not plan on making the aforementioned document (self-evaluation report) publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

_________________________________________________________________________________

(15) Have you made the EXPERT COMMITTEE’S FINAL REPORT, which resulted from the re-accreditation procedure, publicly accessible on the official website of your higher education institution? *

☐ Yes
☐ No

(16) In case the aforementioned document (expert committee’s final report) is available online, please provide the link to it below.

_________________________________________________________________________________

(17) In case the aforementioned document (expert committee’s final report) is not available online, do you plan on making it publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

☐ Yes
☐ No
☐ Other:

(18) Please, explain why you plan/do not plan on making the aforementioned document (expert committee’s final report) publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

_________________________________________________________________________________
(19) Have you made the ACCREDITATION RECOMMENDATION OF THE AGENCY FOR SCIENCE AND HIGHER EDUCATION, which resulted from the re-accreditation procedure, publicly accessible on the official website of your higher education institution? *

☐ Yes
☐ No

(20) In case the aforementioned document (accreditation recommendation of the Agency for Science and Higher Education), is available online, please provide the link to it below.

_________________________________________________________________________________

(21) In case the aforementioned document (accreditation recommendation of the Agency for Science and Higher Education) is not available online, do you plan on making it publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

☐ Yes
☐ No
☐ Other:

(22) Please, explain why you plan/do not plan on making the aforementioned document (accreditation recommendation of the Agency for Science and Higher Education) publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

_________________________________________________________________________________

(23) Have you made the DECISION OF THE MINISTER OF SCIENCE AND EDUCATION ON ISSUING A LICENCE FOR PERFORMING HIGHER EDUCATION ACTIVITIES, which resulted from the re-accreditation procedure, publicly accessible on the official website of your higher education institution?

☐ Yes
☐ No

(24) In case the aforementioned document (decision of the Minister of Science and Education on issuing a licence for performing higher education activities) is available online, please provide the link to it below.

_________________________________________________________________________________

(25) In case the aforementioned document (decision of the Minister of Science and Education on issuing a licence for performing higher education activities) is not available online, do you plan on making it publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

☐ Yes
☐ No
☐ Other:
(26) Please, explain why you plan/do not plan on making the aforementioned document (decision of the Minister of Science and Education on issuing a licence for performing higher education activities) publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

_________________________________________________________________________________

Audit - Periodic independent external audit of internal quality assurance systems

(27) Did your higher education institution go through a periodic independent external audit of internal quality assurance systems? *

☐ Yes
☐ No
☐ Other:

(28) In which year did your higher education institution go through the audit?

☐ 2010
☐ 2011
☐ 2012
☐ 2013
☐ 2014
☐ 2015

(29) Have you made the FINAL REPORT WITH RECOMMENDATIONS, which resulted from the audit, publicly accessible on the official website of your higher education institution? *

☐ Yes
☐ No

(30) In case the aforementioned document (final report with recommendations) is available online, please provide the link to it below.

_________________________________________________________________________________

(31) In case the aforementioned document (final report with recommendations) is not available online, do you plan on making it publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

☐ Yes
☐ No
☐ Other:

(32) Please, explain why you plan/do not plan on making the aforementioned document (final report with recommendations) publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

_________________________________________________________________________________
(33) Have you made the HIGHER EDUCATION INSTITUTION’S RESPONSE TO THE FINAL REPORT, which resulted from the audit, publicly accessible on the official website of your higher education institution? *

☐ Yes
☐ No

(34) In case the aforementioned document (higher education institution’s response to the final report) is available online, please provide the link to it below.

_________________________________________________________________________________

(35) In case the aforementioned document (higher education institution’s response to the final report) is not available online, do you plan on making it publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

☐ Yes
☐ No
☐ Other:

(36) Please, explain why you plan/do not plan on making the aforementioned document (higher education institution’s response to the final report) publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

_________________________________________________________________________________

(37) Have you made the CONCLUSION OF THE AGENCY FOR SCIENCE AND HIGHER EDUCATION WHICH ESTABLISHES THE DEGREE OF THE DEVELOPMENT AND EFFICIENCY OF THE QUALITY ASSURANCE SYSTEM, which resulted from the re-accreditation procedure, publicly accessible on the official website of your higher education institution? *

☐ Yes
☐ No

(38) In case the aforementioned document (Conclusion of the Agency for Science and Higher Education which establishes the degree of the development and efficiency of the quality assurance system) is available online, please provide the link to it below.

_________________________________________________________________________________

(39) In case the aforementioned document (Conclusion of the Agency for Science and Higher Education which establishes the degree of the development and efficiency of the quality assurance system) is not available online, do you plan on making it publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

☐ Yes
☐ No
☐ Other:
(40) Please, explain why you plan/do not plan on making the aforementioned document (*Conclusion of the Agency for Science and Higher Education which establishes the degree of the development and efficiency of the quality assurance system*) publicly accessible on the official website of your higher education institution in the academic year 2015-2016?

_________________________________________________________________________________

III. THE TRANSPARENCY OF INTERNAL QUALITY ASSURANCE PROCEDURES

(41) Does your higher education institution have BODIES in charge of internal quality assurance? (*For example a quality assurance commission/committee or office, other offices and bodies authorized to carry out quality assurance activities*)

☐ Yes  ☐ No

(42) In case your higher education institution does have such bodies, please state which bodies they are and what is included in their scope of work.

_________________________________________________________________________________

(43) Does the official website of your higher education institution contain information about the existence of bodies in charge of internal quality assurance?

☐ Yes  ☐ No

(44) In case this information is available online, please provide the links to webpages where this information is published. *Please, provide a link for each body listed in the previous replies.*

_________________________________________________________________________________

(45) Does your higher education institution have DOCUMENTS which establish the internal quality assurance system and regulate the implementation of internal quality assurance procedures?*

☐ Yes  ☐ No

(46) In case they exist, please name which documents these are.

_________________________________________________________________________________
(47) Does the official website of your higher education institution contain public information about the existence of documents that regulate the internal quality assurance system?

☐ Yes
☐ No

(48) In case this information is available online, please provide the links to webpages where this information is published.
Please, provide a link for each document listed in the previous replies.

_________________________________________________________________________________

(49) Did your higher education institution conduct at least one student survey (on the quality of study programmes and teaching) in the last five academic years? *

☐ Yes
☐ No
☐ Other:

(50) If you conduct student surveys at your higher education institution, how often do you do it?

☐ Every academic year
☐ Every second academic year
☐ Every third academic year
☐ Other

(51) Please specify academic years in which a student survey was conducted at your higher education institution. *

Check all that apply.

☐ 2011/2012
☐ 2012/2013
☐ 2013/2014
☐ 2014/2015
☐ 2015/2016
☐ Not conducted.

(52) Please specify academic years for which student survey results or an analysis of these results was publicly published on the official website of your higher education institution.

Check all that apply.

☐ 2011/2012
☐ 2012/2013
☐ 2013/2014
☐ 2014/2015
☐ 2015/2016
☐ They are not publicly accessible.
(53) For every academic year checked, please provide the link to the webpage that contains the published results.

_________________________________________________________________________________

(54) Do you have any additional comments, questions or suggestions?

_________________________________________________________________________________
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<th>Definition</th>
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<tr>
<td>AMEUP</td>
<td>Agency for Mobility and EU Programmes (Croatia), available at <a href="http://www.mobilnost.hr">www.mobilnost.hr</a></td>
</tr>
<tr>
<td>ARWU</td>
<td>Academic Ranking of World Universities website, containing a ranking of world higher education institutions, available at <a href="http://www.shanghairanking.com/index.html">http://www.shanghairanking.com/index.html</a></td>
</tr>
<tr>
<td>ASHE</td>
<td>Agency for Science and Higher Education (Croatia), available at <a href="http://www.azvo.hr">www.azvo.hr</a></td>
</tr>
<tr>
<td>CBS</td>
<td>Croatian Bureau of Statistics, available at <a href="http://www.dzs.hr">www.dzs.hr</a></td>
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<tr>
<td>CEQ</td>
<td>Course Experience Questionnaire, teaching evaluation tool used by students in Australia and United Kingdom</td>
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<td>CES</td>
<td>Croatian Employment Service</td>
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<tr>
<td>CHEPS</td>
<td>Center for Higher Education Policy Studies is a research institute at the University of Twente, available at <a href="https://www.utwente.nl/bms/cheps/">https://www.utwente.nl/bms/cheps/</a></td>
</tr>
<tr>
<td>CLC</td>
<td>Course, Library, and Computer, teaching evaluation tool used at medical higher education institutions in the USA</td>
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<tr>
<td>CLIN</td>
<td>Clinical, teaching evaluation tool used at medical education institutions in the USA</td>
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<tr>
<td>CroQF web portal</td>
<td>Website containing information about the sectors within the CroQF portal (website development led by the Ministry of Labour and Pension System), available at <a href="http://www.hkoportal.hr/#">http://www.hkoportal.hr/#</a></td>
</tr>
<tr>
<td>CSO</td>
<td>Civil society organisation</td>
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<tr>
<td>CUG</td>
<td>The Complete University Guide (CUG) is a website containing a database of higher education institutions and undergraduate and graduate study programmes in the United Kingdom, together with the ranking of these higher education institutions and study programmes. Available at <a href="http://www.thecompleteuniversityguide.co.uk/league-tables/">http://www.thecompleteuniversityguide.co.uk/league-tables/</a></td>
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<tr>
<td>DIU Libertas</td>
<td>Dubrovnik International University Libertas, available at <a href="http://www.libertas.hr">http://www.libertas.hr</a></td>
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<tr>
<td>EHEA</td>
<td>European Higher Education Area</td>
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<td>EU</td>
<td>European union</td>
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<tr>
<td><strong>HE</strong></td>
<td>Higher education</td>
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<tr>
<td><strong>HILVE</strong></td>
<td>Heidelberger Inventar zur Lehrveranstaltungsbeurteilung, teaching evaluation tool at higher education institutions in Germany</td>
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<tr>
<td><strong>MLPS</strong></td>
<td>Ministry of Labour and Pension System of the Republic of Croatia, available at <a href="http://www.mrms.hr">www.mrms.hr</a></td>
</tr>
<tr>
<td><strong>MOZVAG</strong></td>
<td>Information support system for study programmes evaluation (Croatia), available at <a href="http://mozvag.srce.hr">http://mozvag.srce.hr</a></td>
</tr>
<tr>
<td><strong>NSL</strong></td>
<td>Nursing Skills Lab, teaching evaluation tool used at medical higher education institutions in the USA</td>
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<td><strong>OECD</strong></td>
<td>Organization for Economic Cooperation and Development</td>
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<td><strong>QAS</strong></td>
<td>Quality Assurance System</td>
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<tr>
<td><strong>SCIE</strong></td>
<td>Science Citation Index-Expanded, scientific citation index</td>
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<tr>
<td><strong>SD</strong></td>
<td>Standard deviation</td>
</tr>
<tr>
<td><strong>SSCI</strong></td>
<td>Social Science Citation Indexes, citation index for social sciences</td>
</tr>
<tr>
<td><strong>Stipendije.info</strong></td>
<td>Croatian national web portal on scholarships and other forms of financial support to students, available at <a href="http://www.stipendije.info">www.stipendije.info</a></td>
</tr>
<tr>
<td><strong>Studij.hr</strong></td>
<td>Croatian national web portal on study programmes and higher education institutions in Croatia, available at <a href="http://www.studij.hr/">https://www.studij.hr/</a></td>
</tr>
<tr>
<td><strong>Study in Croatia</strong></td>
<td>Croatian national web portal for international university students (website development led by AMPEU), available at <a href="http://www.studyincroatia.hr/">http://www.studyincroatia.hr/</a></td>
</tr>
<tr>
<td><strong>U-Multirank</strong></td>
<td>Website containing a database of higher education institutions and study programmes from around the world, where users can search and compare information on higher education institutions and study programmes based on various quality criteria. Available at <a href="http://www.umultirank.org/#/home">http://www.umultirank.org/#/home</a></td>
</tr>
<tr>
<td><strong>UNISTATS</strong></td>
<td>Website containing the official national database of undergraduate study programmes and higher education institutions of the United Kingdom, available at <a href="https://unistats.direct.gov.uk/">https://unistats.direct.gov.uk/</a></td>
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[^95]: More detailed information on the Eurostudent report is available on the IDE website: [http://www.iro.hr/hr/politike-visokog-obrazovanja/socijalna-dimenzija/eurostudent/](http://www.iro.hr/hr/politike-visokog-obrazovanja/socijalna-dimenzija/eurostudent/)
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“Higher education is crucial for individual, community, regional and national development, accruing economic, social and well-being returns. It is therefore of public interest and concern that the quality of higher education provision is high and that there is transparency in quality assurance systems and outcomes. This publication and associated examples is aimed at civil society organisations - and the interested public including students, families, schools, employers and the media - to assist them to better understand, analyse and interpret the various quality processes, reports and outputs about higher education provision. Quality assurance is a complex and bureaucratic process, even for ‘insiders’, but this publication clearly describes both the internal and external systems, the outputs that should be available, and develops and articulates a process for reviewing transparency. The associated local reports take three areas and analyse the transparency of internal and external quality assurance process and the data (outcomes) on quality across the institutions within these geographical regions. The approach is systematic and valuable, and identifies some key challenges in the system, including the lack of transparency regarding the publication of internal and external documentation by institutions and the Ministry, and inconsistencies in the outcomes compared to the evidence cited in the narrative reports. The future development of society depends on an effective higher education system, and this publication both assists civil society organisations to take action and draws attention to some of the weaknesses in the current system and should serve as both a call to action and a toolbox.”

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