

UNIVERSITY OF ZAGREB

EVALUATION REPORT

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1. Introduction

This report is the result of the evaluation of the University of Zagreb (UNIZG), Croatia. The evaluation took place during the academic year 2010-11, with a preliminary visit to UNIZG from 23 to 25 February 2011, and the main visit to UNIZG from 26 to 29 April 2011.

1.1 Institutional Evaluation Programme

The Institutional Evaluation Programme (IEP) is an independent membership service of the European University Association (EUA). IEP offers evaluations to support the participating institutions in the continuing development of their strategic management and internal quality culture.

The distinctive features of the Institutional Evaluation Programme are:

- A strong emphasis on the self-evaluation phase
- A European and international perspective
- A peer-review approach
- A support for improvement.

The focus of the IEP is the institution as a whole and not the individual study programmes or units of the university. The IEP focuses on:

- Decision-making processes and institutional structures and the effectiveness of strategic planning
- Relevance of internal quality processes and the degree to which their outcomes are used in decision making and strategic planning, as well as perceived gaps in these internal mechanisms.

The evaluation is guided by four key questions, which are based on a 'fitness for (and of) purpose' approach:

- What is the institution trying to do?
This question refers to the mission of the institution. A clear mission is important in order to decide on priorities, strategic objectives, with planning and the means to reach these objectives.
- How is the institution trying to do it?
The evaluation investigates the way in which the institution attempts to fulfil this mission in terms of organisation, governing structures and processes, including performance, quality assurance and accountability.
- How does it know it works?
This question points at the necessity of having sound internal quality arrangements and monitoring systems in place. The evaluation team looks at the institutional policies and practices regarding quality and other relevant processes, in terms of actors, structures and procedures.
- How does the institution change in order to improve?
This is a key question for the IEP. It is the institution's capacity for change and improvement that allows it to deal with a fast-changing environment and to respond proactively to evolving needs and opportunities.

1.2 Reference framework

The team adopted a specific reference framework for its evaluation of UNIZG, which in addition to the overall IEP methodology and features, would help it to undertake an effective and efficient evaluation of UNIZG in its particular context. This reference framework was built around the following elements:

- The status of UNIZG as a public university. In the team's understanding of this status, a public university is supported and funded by the public, in order to pursue issues of public importance. This applies particular responsibilities to UNIZG, as the largest and most comprehensive public university in Croatia, in terms of providing a public good and ensuring that public investment in higher education and research is used effectively and efficiently in pursuit of the outcomes which Croatia needs. In particular, UNIZG needs to be competitive at both national and European levels in order to contribute fully to the development of Croatian society and economy, and thus in assisting Croatia to become competitive.
- Croatia is in the process of accession to the European Union. This means UNIZG must also operate in a broader European framework, and that EU good practice and benchmarking should be used systematically across all aspects of the university's work. Many aspects of European higher education are evolving rapidly, and UNIZG needs to remain proactively involved in these developments, both for its own good but also for the broader good of the Croatian higher education system and society.
- UNIZG has identified a number of comparable universities in neighbouring countries with which it proposes to benchmark its own strategic development. The Team strongly supports such European benchmarking, across a range of key academic and operational performance indicators. Regular and systematic benchmarking can be central to providing successful guidance for ongoing changes and improvements at UNIZG.
- Quality assurance is now a major element which underpins higher education across Europe. In this respect, the European Standards and Guidelines for Quality Assurance in Higher Education (ESG, 2005) provide Europe-wide principles, standards and guidelines for all players. It is crucial that all main actors across UNIZG are aware of these and use them in a systematic and holistic manner for quality assurance of their work and activities.
- Linked to Croatia's EU accession process, UNIZG now has the opportunity to compete for very considerable European research funding, often in partnership with other European universities. However, it also means that Croatia will have to contribute much greater amounts of its own funding to the European research budget, and that Croatian universities will have to compete at a high level in order to win this money back. This will represent a very important change for UNIZG, as the dominant research university in Croatia, in its strategic approach to obtaining resources for research and needs to inform research planning currently underway.

- Again linked to the EU accession process, Croatia will become part of an open labour market with attractive opportunities abroad for Croatians, as well as improved opportunities in Croatia for foreign nationals. UNIZG needs to prepare its students, graduates and staff for these changes, including in professional areas regulated at European level, by encouraging and supporting greater inwards and outwards mobility and exchange.
- Given the current economic situation in Croatia and indeed more broadly across many European countries, competition is increasing, particularly in areas of economic performance, innovation, efficiency, cost efficiency. In order for Croatia to meet these challenges, UNIZG must use its considerable expertise and human capital to help meet these challenges at national and regional levels. Universities have a responsibility to ensure that the graduates they produce are well prepared for unpredictable labour markets, with relevant levels of generic and specific competences, skills and attitudes to ensure their competitiveness and successful employment. This is a key tenet of the Bologna Process and the bachelor – master – doctorate degree structures.
- As noted above, UNIZG will face increased competition over the coming years both from inside and outside Croatia for all resources. The university needs to prepare more intensively for this competition in order to ensure it can successfully achieve its own strategic priorities.
- In order to ensure that UNIZG can meet the challenges outlined by the above factors, the team considers that the university will need to re-examine its own internal structures. The tenet that structure should follow function for ensuring efficiency, cost efficiency, accountability and timely operations, does not appear to be respected at UNIZG, with little consideration of function apparent in the overall structure of the university.

The IEP team would like to provide some explanation and commentary to ensure proper understanding of the term “integration”. IEP evaluations do not provide a blueprint for the implementation of their recommendations, but rather seek to provide a good understanding of the context and options available, and of how to approach the implementation of recommendations. Since UNIZG’s most urgent and main problem is the need for restructuring, the team would like to underline some aspects in this regard. Over the last 10 years, numerous evaluations of UNIZG have provided similar advice regarding the need for restructuring. In this regard, the evaluation team would like to point out three issues:

1. Since public institutions are established to operate for the public benefit and good, the essential requirement is that a public institution is operating well, with competitive and good quality performance and outputs. The public is not interested in the structure of such an institution *per se*, but leaves this question to the institution’s autonomous preference and decision.

2. When they hear external advice calling for the restructuring of UNIZG, many persons interpret this as a call for centralisation and as a threat to the autonomy of academic and other units.
3. Some people understand integration as a soft approach to centralisation. This is wrong, since integration should be understood as the coherent bringing together of functions to enable positive synergy which benefits all the structures involved, including faculties, departments and offices at the rectorate level. In essence, integration can strengthen the university as well as professional autonomy of its constituent units.

According to the above, the IEP team would like to point to the issue of genuine UNIZG restructuring, based on effective integration and an understanding of the issue explained in point 1 above. In principle, UNIZG should build its restructuring on the structure which has already been used over many decades, but within genuine integration of suitable functions/operations. The most suitable structure for UNIZG can be identified and verified by meeting the imperatives of good performance and quality of output, and by being able to compete with well-functioning European universities. As already mentioned, decisions regarding structures should be made following the identification of agreed functions. Therefore whenever the issue of integration is discussed in this report, it should be understood in this context.

1.3 University of Zagreb and the national context

UNIZG was presented in the self-evaluation report and during the IEP team's discussions with many representatives as a flagship university with a special position and special responsibilities in Croatia. It is by far the largest university in Croatia in terms of students, staff, research outputs and budget. It is also, historically, the progenitor of the other Croatian universities and in many cases continues to provide teaching and research support to these universities across a wide range of fields.

However, UNIZG is also a fragmented university, which operates as confederation of faculties, where each faculty has considerable operational, financial and legal independence. This has resulted in a situation where the large potential of the overall university is, in the opinion of the IEP team, considerably weakened by the quasi-independence of the faculties. In addition, while there is a large amount of collective autonomy across the various university structures, the team found that there was overall poor levels of awareness of social accountability, particularly in the context of a national flagship and public university. The team heard several times during its visit that UNIZG could be compared to a "sleeping giant" which was neither using nor developing its potential properly. Based on the evidence presented in the self-evaluation documents and during the IEP team's visits, the team firmly believes that there is significant potential for favourable synergistic gains to be achieved through a much more functional integrated university structure which UNIZG should explore.

The national context in Croatia in 2011 is challenging and undergoing rapid change. There are significant economic difficulties facing the country, with high levels of unemployment

particularly among young people and an overall uncompetitive national economic situation. The 2010 World Economic Competitiveness report ranks Croatia in the mid-30s (middle rank) for human resources and science graduates, but in mid-50s (bottom rank, among last 3 countries) for economic measures such as productivity and innovation. This is surprising and difficult to understand, particular in the context of national potential and UNIZG research, human and student resources.

Given the state of public finances, government investment in higher education and research has been reduced significantly since 2009, and there are proposals currently being developed by government regarding a new system of funding for students which would have a major impact on direct university revenues and possibly on other public funding for universities. There is no national development strategy or higher education strategy currently in Croatia. However draft legislation was published prior to the team's second visit regarding the reform of research funding.

During the period 2000 – 2010, UNIZG underwent many evaluations of various types, including five international and three national evaluations. As a result, the university is well aware of the issues and problems which it is facing and which need to be addressed. Some of these are internal challenges, while others are as a result of the national operating context and broader external environment. In addition, the Rector's mandate document for his second term of office – currently underway - contains a good overview and analysis of these internal and external issues. However, despite this extensive experience, UNIZG remains weak in terms of operational structures, performance, innovation, outputs and in seeking solutions to overcome and consequently improve these weaknesses.

As mentioned in the IEP team's reference framework, UNIZG will be exposed to increased international competition over the coming years, for funding – in particular research funding, as well as for high quality staff and students. As the EU accession process gathers momentum, the university will need to identify more clearly its own strengths and areas of high potential, which can compete successfully at international level. The university also faces increased national competition as the smaller regional universities gain in experience and attractiveness for both staff and students, including at postgraduate level.

1.4 The Self Evaluation Process

In accordance with the IEP guidelines, UNIZG appointed a self-evaluation group (SEG) which was chaired by Vice-Rector Melita Kovačević. This committee was composed of 10 academic and administrative staff and 3 student representatives, as well as 3 special focus advisors, and backed up by a technical support group and a monitoring group. The SEG produced a 28 page self-evaluation report, accompanied by appendices and other supporting documentation, which was sent to the IEP team in advance of the preliminary visit.

The evaluation team found the report to be open, self-critical and very informative. However, given the time constraints under which the report was prepared, the broader UNIZG community was not well informed about the self-evaluation process, and apart from the self-evaluation group, few people actively contributed to the process of preparing the self-

evaluation report. This was seen by the IEP team as somewhat of a missed opportunity, given the need across UNIZG to build greater cohesion and awareness around strategic developments and the necessity of broad change processes. In the opinion of the team, the UNIZG leadership could still use the momentum of the IEP evaluation for these purposes, by discussing this external report and the self-evaluation report in depth within and across the university.

The first visit by the evaluation team took place from 23 to 25 February 2011. At the end of this visit, and in order to complement the information received through the self-evaluation report, the evaluation team asked UNIZG to provide a significant amount of additional information on a number of important topics. These included more detailed information and data on staff and student mobility, output performance, research issues, quality assurance and financing, as well as some general Croatian legislative, demographic and labour market information. This request meant significant additional work for the self-evaluation group, for which the team is grateful. The additional information was provided in advance of the main visit, which took place from 26 to 29 April 2011.

During its two visits, the evaluation team met the Rector, Vice-Rectors; self-evaluation group; external stakeholders; Deans and members of Rector's Collegium, representatives of UNIZG Field Councils, Deans, accountants, academic staff and students from the faculties of economics and business, electrical engineering, humanities and social sciences, law, medicine, mining, geology and petroleum engineering, science, and from physical education and sport; central staff from the quality office and the international office, and UNIZG student council representatives.

1.5 The evaluation team (later "team")

The evaluation team consisted of:

- Alojz Kralj, former Rector, University of Ljubljana, Slovenia, as team chair
- Jacques Lanarès, Vice-Rector, University of Lausanne, Switzerland
- Öktem Vardar, former Vice-Rector, Isik University, Turkey; Secretary General, Magna Charta Observatory, Bologna, Italy
- Christian Stråhlman, MSc student, Lund University, Sweden
- Lewis Purser, Director of Academic Affairs, Irish Universities Association, Ireland, as team coordinator.

The team would like to thank the UNIZG Rector, Aleksa Bjeliš, for his invitation to undertake this evaluation and for devoting his time to the Team. The team would also like to thank all the staff and students at UNIZG who gave time to meet and have very open discussions during the team's two visits to UNIZG, and all those who worked hard to prepare a good self-evaluation report and the many additional annexes which were requested. In particular, the team would like to thank Vice Rector Melita Kovačević and her team for the very friendly and efficient organisation and coordination of the IEP visits.

2. Governance and Management

The team spent a considerable amount of time during its visits to UNIZG examining issues linked to the governance and management of the university. These issues are analysed extensively and critically in the UNIZG self-evaluation report, and have also been the subject of many of the previous evaluations of UNIZG. The team was agreeable surprised to note the overall consistent levels of agreement it encountered across all parts of the university concerning the need for change and the potential benefits of greater integration and coordination. The team will therefore limit itself to a number of specific observations which it would like to emphasise.

Despite clear recommendations from multiple external expert sources over the last ten years, and although there are already a number of integrated universities – albeit much smaller and younger than UNIZG - in Croatia, UNIZG continues to exist as a non-integrated federal structure. This structure imposes very important limitations on the overall capacity for change, effectiveness and efficiency of the university, on the benefits of quality assurance activities, and on the university's use of public funding, across areas as diverse as human resources, buildings and facilities, student services, and research infrastructure. The team also noted that the existing legislation – as well as the drafts of proposed new legislation which was under discussion during the team's main visit to UNIZG – does not make such integration impossible.

As already stated, the team would like to stress that in this context “integrated” does not mean “centralised”. This appeared as a point of misunderstanding during some of the team's meetings across UNIZG. “Integrated” means faculties or centres which are part of the single legal entity, the university. Processes which need integration include those such as strategic management, public relations, priority budgeting, assessing institutional effectiveness, institutional accreditation and internal performance with quality assurance and reporting (internal and external). But this does not mean centralisation; decisions should continue to be taken at the lowest possible level without damaging the legal integrity of the whole institution, according to the principle of subsidiarity, especially where it pertains to teaching and research. However, integration will allow the university to establish and implement strategic priorities for the entire institution.

As a result of the current structures, UNIZG is not in a position to develop any agreed university-wide vision and mission, which in turn makes it extremely difficult for the university to move forward in any strategic direction. There are research and e-learning strategies but no overarching university strategic plan, although many faculties have their own such plans, but which are devised and then implemented separately to each other. Accordingly the very necessary synergical gains which are possible are currently not available.

However, when looking at the university's existing governance and management structures, it can be seen that in most cases these operate in addition to similar faculty and school structures, leading to multiple layers and many consultative bodies with, in reality, very limited decision making powers. The result is overall decision making structures which are

weak, and which absorb and waste large amounts of time and effort for senior personnel across the entire university.

Given these structures, but also driven by a variety of funding mechanisms and local considerations, the gathering and reporting of data across UNIZG is unreliable and incomplete. These data are essential for the ongoing improvement of teaching and research at the university, and so that these activities can be backed up by effective and efficient management and administrative systems. Despite notable academic achievements and research performance across a number of faculties, good quality data is simply not available on a systematic basis. It will be impossible for UNIZG to undertake the necessary relevant benchmarking with other EU and regional universities, or to meet the European Standards and Guidelines for quality assurance (ESG) without this data or an overarching and effective UNIZG information system.

These all clearly point to a complicated and inefficient system of governance and management and UNIZG, which in the opinion of the IEP team is of questionable cost efficiency and low competitiveness.

The team would like to commend the concept of Field Councils, which are seen as a good start within UNIZG towards addressing these challenges and towards more coherent collaboration between relevant academic and research areas. These Field Councils also present a potentially effective basis for closer work in clusters between various faculties and new merged schools.

It appeared from discussions that students were not well represented on the Field Councils, since the issues discussed were not seen as relevant by students and students felt they could contribute more effectively at Senate level. If Field Councils are to develop as an important element in the reform of governance and management at UNIZG, it will be important to ensure that students are fully involved at this level also.

More generally, students are included *de iure* at all levels of governance across UNIZG. However, *de facto*, their influence did not appear to the team to be sufficient, particularly in the overall area of quality assurance. In addition, the rules and procedures which allow students to participate in university governance and quality assurance matters, without encountering unnecessary obstacles when they combine this activity with their studies, appeared to the team to be more restrictive than in many other European universities. In particular, the system of sabbaticals for elected university-level student representatives appeared to be under-developed. Student involvement and participation will be important in the next period of change at UNIZG, and it may be useful to review the current rules and procedures in order to encourage this participation.

The Team therefore recommends that UNIZG enter into a careful and full consideration of the following, when working towards a more effective governance and management system:

- Build on the implicit understanding already present across UNIZG regarding the need to develop structures which ensure improved integration and coordination for the benefit of all players. In this process, it is important to remember the maxim of “form follows function”.
- Urgently ensure an overarching and effective university information system which can provide accurate and timely data for both faculty and university level planning and decisions making purposes.
- Develop a shared UNIZG vision and strategic plan, which can provide the initial impetus towards greater understanding of the added value of undertaking more activities on a shared or integrated basis across the university.
- Minimise bureaucracy for both staff and students, while also optimising efficiency and cost effectiveness, in order to increase the competitiveness of UNIZG and its constituent components.
- Integrate and coordinate services (e.g. financial management, legal services, reporting and public relations buildings maintenance, payroll and other human resource functions, and many other student and staff services) where efficient and where synergical gains are possible. In doing this, delegate functions to lower levels where appropriate. There appeared to be large numbers of senior academic staff involved in the organisation of such services.
- Put in place a long term planning system to ensure that resources which become available across the university because of staff retirement or other departures are redeployed in the most effective way to meet the strategic needs of the entire university.
- Consider redefining the autonomy of deans, providing them with greater decision making power regarding operational issues and ensuring more accountability regarding strategic issues.
- Ensure that the role of Field Councils is clear, and that it transforms appropriately towards the concept of Schools. Faculties which choose to join such Schools may in due course find it beneficial to transfer their legal entity to the School, or ideally to the university level, allowing academic staff to concentrate further on teaching and research.

3. Quality Assurance

UNIZG has a Vice-Rector for Students and Study Programmes, who is also responsible for quality assurance (QA) although this element is no longer included in her title. UNIZG also adopted a quality assurance framework in early 2011, covering all major university activities. These are clear signals that the university intends to take a more pro-active approach to quality assurance and quality improvement issues, including the modernisation of study programmes and devoting greater attention to students. In doing so, UNIZG is seeking to align itself with developments across European higher education where, through the Bologna Process, improving the quality of higher education has become a major policy focus.

However, during its visits, the team became aware that although these steps represent a good start, the implementation of the QA framework is at its beginning, and that the leadership and coordination functions under the new structure have not yet been appropriately established. Likewise, UNIZG norms and values need to be established – one way to achieve this is through the proposed benchmarking exercise with other relevant universities. Apart from providing key comparative indicators, this will also help UNIZG move towards identifying its own distinctive vision and mission.

From its discussions with a wide range of staff and students across the university, the team came to the conclusion that – from their various European perspectives – the overall culture of quality, as a shared value and with active involvement, at UNIZG can be considered inadequate and low. In many cases quality assurance appeared to be seen by members of UNIZG as an imposed exercise leading to unwelcome bureaucracy. In the view of the team, quality assurance activity presents UNIZG with an opportunity to learn from its own experiences so far, and to become a learning organisation which can use such exercises for its own progress, improving its reputation, and with internal benefits in delivery of its mission and enhancing the quality of its teaching and research.

Concerning the current systems in use at UNIZG for the evaluation of teaching, the team formed the opinion that evaluation mechanisms so far have been aimed more at controlling individual teacher performance rather than at improving teaching. Questionnaires currently appear to be aimed at catching and correcting a few ineffective teachers, whereas the mechanisms in use now already contain information about all teachers, which could be used as part of a process to improve the overall teaching and learning process.

The feedback loop to students has not been completed, so students do not know whether the feedback they provided has been used by anyone or had any effect. As a result, students quickly become demotivated, leading to low response rates and little interest in such questionnaires, which in turn leads to statistically unreliable data, which means that nobody can use the system.

The team therefore recommends that UNIZG enter into a careful and full consideration of the following, when putting in place an operational quality assurance system:

- All QA activities should follow the “closed loop” principle. This means, for example, that feedback must be given to students on what has happened as a result of the teaching evaluation questionnaires which they filled in.
- National QA requirements exist – UNIZG needs to use these for its own benefit (i.e. for quality improvement), rather than just as a bureaucratic exercise
- Apply the European Standards and Guidelines in a holistic way, and build these into UNIZG operations.
- Consider rethinking the modalities of evaluation of teaching by students (mode, type of questionnaire, feedback, etc.)
- Improve the general coordination for QA across the university, including the use of key performance indicators but also all measures and projects to develop quality (not just the organisation of evaluation processes). Elaborate a global quality concept with the main values underlying quality processes and objectives.
- Use internal quality assurance procedures to raise the UNIZG requirements for appointment and promotion, also with the aim to overcome the risk of inbreeding within the university. This will help to enhance UNIZG’s reputation, reinforce its flagship status and raise awareness of the need for excellence.
- The responsibility for UNIZG staff appointments and promotions should be passed from Faculties to Field Councils. This will help to improve coordinated planning and cooperation across related academic fields and strengthen inter-disciplinary capacity.

4. Teaching and Learning

The IEP team learned from the self-evaluation report and during its visits to UNIZG that, in the organisation of teaching and research and the range of study programmes on offer, UNIZG enjoys a higher level of autonomy than in some other areas. The introduction of quality assurance procedures has since strengthened this autonomy. However, from the documents provided and in its visits to faculties and in talks with faculty representatives across a wide range of fields, the team came to the conclusion that there are wide varieties between faculties in terms of class sizes, student-staff ratios, student retention and drop-out rates, time to graduation, access to suitable infrastructure and learning facilities, and generally in the quality of the learning experience for students.

Given the excessively large number of study programmes available across UNIZG, and the many overlaps between these programmes – both within and between individual faculties, there is considerable scope for the rationalisation of the overall programme supply in order to strengthen the learning experience for students, reduce staff teaching time and improve some of the issues outlined just above.

The team would like to emphasise the importance of student centred teaching, and the importance of a learning outcomes based approach. In this, there is a shift from teaching to learning by adopting new teaching and learning methodologies and the introduction of more effective learning environments; the time spent lecturing *ex cathedra* is limited; the teacher is no longer at the centre of the stage, but acts more as a facilitator of the learning process. Learning is not limited to the class room, but continues outside in a wide variety of different settings, with and without the physical presence of the teacher.

The introduction of the bachelor - master degree structures has contributed to some recent improvements in overall student drop-out and time to completion rates, but the rates are still high compared to many European universities, and with large variations between faculties across UNIZG. The recent development of an integrated and innovative doctoral studies policy across UNIZG and with other organisation points the way to possible future developments for the bachelor – master structures also. However, drop-out rates for doctoral students are very high.

It was clear that the relation between ECTS credits and student workload was not uniform across UNIZG. In fact, it was clear that in many cases there was no systematic reference to student workload in the attribution of ECTS credits. In addition, the credit transfer and accumulation system does not function properly within UNIZG - the team heard multiple reports of the many administrative obstacles which students face if they apply to study modules or courses outside their own programme or in another UNIZG faculty. Despite this situation, credit transfer and accumulation procedures between UNIZG and another university appeared to work reasonably well for the small number of students who are internationally mobile. Students repeatedly mentioned that it was easier to arrange a study period in a foreign university than in another UNIZG faculty.

In general, there were many complaints from both students and staff regarding the implementation of the Bologna Process at UNIZG. Some of this was linked to national

requirements, e.g. in the field of quality assurance. It was evident that many students when registering at UNIZG faculties were not fairly or fully informed of a wide range of important information, such as average time to completion or drop-out rates at that faculty, or potential employment opportunities on graduation, information which might have influenced them in their choice of faculty or study programme had it been available. It should be noted that one element of the European Standards and Guidelines for quality assurance stresses the importance of providing students with full and relevant information needed to make the right study choices.

In order to improve the overall framework for teaching and learning at UNIZG, the team recommends that the university:

- Strongly support the full and correct application of Bologna principles – instead of “Bologna-inspired” administrative rules - across the UNIZG, including employability, student centred teaching, the use of a learning outcomes approach, modularity, mobility, and competence-oriented learning.
- Analyse reasons for the continued high rates of drop-out and late completion, including at doctoral level, and develop responses to ensure that these decrease in a targeted way.
- Use the QA process for systematic programme evaluation and renewal, including the application of the Bologna principles mentioned above.
- Ensure that ECTS credits reflect the reality of student workload across all programmes and are easily recognised, particularly for mobility within and between UNIZG faculties.
- Provide fair and better information to students and prospective students about study programmes and outcomes.

5. Research

Despite a number of high performing areas and some faculties with excellent research outputs, the data provided by UNIZG as part of the self-evaluation process clearly show that research outputs (e.g. number of articles and highly cited articles published in leading international journals, number of recently registered patents, knowledge transfer to economy and new job creation, new companies created by UNIZG graduates, large international, EU, bilateral or nationally funded research projects completed or in progress in recent years...) and revenue (international, EU, bilateral and national competitive funding obtained per year, royalty income from artistic activities, sold rights, music royalties, or knowledge transfer, including royalties for patents, patents sold and technology and knowledge transfer...) are not in line with the university's flagship status and size.

Closer examination of the data also reveals that research is very fragmented across the university, in many cases undertaken individually or in very small teams, is for the most part unstructured, and despite the existence of an official UNIZG research strategy, does not appear to follow any shared vision or strategic direction. The external funding of research at UNIZG is low and broadly distributed. Likewise, the international visibility of UNIZG research is limited overall. The team heard from several sources that it was difficult to raise the necessary matching funding needed to participate in some European projects. During their meetings with staff the team also understood that the motivation for publication was rather low, and was not an important element in the promotions process.

Given the need to develop UNIZG's reputation and visibility, special attention is needed to ensure that research performance (publications, competitive funding, patents, etc.) improves rapidly over the coming period. However, the team found no system at UNIZG for rewarding good research performance. In addition, the team found that the collection of research output data was poor. The completion rates for doctoral studies appear particularly low, although recent new doctoral education policies should help to change this.

The work recently begun at university level through the creation of the technology transfer and patent office was widely praised by those whom the team met in Zagreb, however it is still at an early stage, and will need more time to start proving its success.

Another positive recent initiative has just begun, a seed fund with small amounts contributed by each faculty. Applications have been received and awards should be announced before the summer. Likewise, it will be some time before any visible results of this initiative will be available.

In order to improve the overall situation regarding research at UNIZG, the team recommends that the university:

- Start developing the next UNIZG research strategy, aligned to the university's vision, and with key priority areas which can serve as a starting point for a more consolidated approach to research activity, in particular for successful participation in European Framework programmes. As well as developing this shared strategy, UNIZG will need to put in place the mechanisms to implement the strategy, as well as a

decision making structure to accompany it. The current research strategy aims at inter-disciplinarity but this is impossible to implement due to the high walls which currently exist at UNIZG between most disciplines!

- Continue to modernise the university's approach to doctoral education across UNIZG, in line with European best practice and with a range of relevant international partners.
- The next UNIZG research strategy should also include the systematic benchmarking of research performance and doctoral education with selected universities.
- Put in place incentives for publications and for obtaining international competitive funding. These incentives could include awards, increased visibility, reduced teaching time, etc. Consider increased flexibility in job descriptions to link research performance and teaching load.
- Enhance the operation of the UNIZG research fund which can be used effectively to provide seed funding for university strategic research initiatives, as well as matching funding to encourage participation in EU programmes.
- Develop UNIZG guidelines on intellectual property protection, patenting and knowledge transfer rules, as well as principles and systems to support, stimulate and reward successful inventors.

6. Internationalisation

The self-evaluation report and additional annexes, as well as information provided during the team's two visits to UNIZG, showed very low levels of staff and student mobility (especially incoming) at the university. However, notable improvements have taken place in the last year, and since January 2011 Croatia has joined the EU Lifelong Learning Programme, including Erasmus. This development – something for which the team was informed that UNIZG had lobbied strongly - should now give significant additional impetus to improved mobility levels. However, given the existing small overall numbers, it is important that all students who participate in such mobility programmes are able to obtain proper recognition of the work they have done while at a different university.

One of the benefits of such mobility is the ability to compare and introduce – via staff and students – fresh ideas and new perspectives into the life and work of UNIZG. This is important for the students and their future employability options, but it is also important for staff to foster connections for future cooperation and to be exposed to different ways of doing things and different academic and administrative traditions. In this way, staff mobility can help overcome the problem of academic inbreeding in Croatia.

The team also found that joint research or study programmes are rare at UNIZG, and although a small number of innovative study programmes are now being developed through English, such international programmes remain the exception at UNIZG and can face difficulties in becoming fully accredited.

As in other areas, the importance of good and reliable information systems in this area needs to be emphasised, both as a tool for policy making and for the quality assurance of these activities. At present, the data collection mechanisms regarding international activities in use at UNIZG are not completed by all faculties and therefore of limited value.

The team noted that UNIZG appears to have many inactive inter-university agreements, and that it would be useful to move towards a more systematic form of relationship with such partners. The international competitiveness and performance of UNIZG does not appear to have been at the forefront of discussions regarding the development of these agreements and any ensuing actions. In addition, whereas in the past such agreements were often reached on the basis of individual contacts, it is important now to move towards a more strategic system of mobility and international cooperation to assist with UNIZG staff development and the broader development of the university.

In order to increase and improve overall levels of internationalisation at UNIZG, the team recommends that the university:

- Use internationalisation, research cooperation and excellence in research as key areas to build up the reputation and visibility of UNIZG. Put in place a strategy to create strong partnerships including research and teaching collaborations with a small selected number of institutions.

- Ensure complete recording of student and staff mobility, and other international activities, across all parts of UNIZG. The feedback received from mobile students and staff needs to be used in the further development and improvement of international activities.
- Allow more staff mobility time/sabbaticals, freeing up staff time by building critical mass in research teams and by reduce overlapping teaching programmes. Such staff mobility needs greater planning, and to be aligned with the strategic objectives of the university.
- Establish favourable conditions, for example housing, equipment, research support staff, and financial conditions, to attract and invite outstanding researchers to spend their sabbatical year at UNIZG.
- UNIZG should provide more systematic information to students about mobility possibilities and ensure a fully functioning credit transfer and accumulation system, both internally and for international mobility.
- The UNIZG international office should make an annual report to the Senate, for discussion and action by the Senate, with analysis of developments in international activities, and with feedback received from mobile students returning to UNIZG.

7. Capacity for change

Following the above main areas, the team also considered the overall capacity for change at UNIZG. In doing so, the team would like to emphasise the urgent need for change across the entire university, if UNIZG is to continue as a flagship university which can exert any sort of attraction to staff and students across Croatia and elsewhere. The need for change is not an abstract concept – it is a reality imposed by the external world which is currently changing much faster. Without faster and more substantial change, UNIZG will be left further behind,

There is certainly capacity for change across the breadth of the university, its staff and students. However, the current UNIZG structures and federal system do not encourage or facilitate such change. The university will need to take a more pro-active approach and initiative in leading this change, for the long-term good of its own constituent faculties and schools. As part of this, UNIZG will need to develop much greater levels of trust and transparency across the university, which will allow for such change to take place.

Indeed, in the opinion of the team, the need for change at UNIZG is so urgent that the team considers the university should also collaborate with external partners in order to influence the forthcoming legislative changes. An intense campaign with politicians, with academics from other universities and with other key players, including at regional level, needs to be planned and implemented. It is most important that this new opportunity to influence change towards greater positive integration for the university is not lost.

In order to facilitate this change, the university will also need to provide systematic training for academic staff across a range of new areas. Areas to cover include quality assurance, new pedagogical approaches such as tutoring, competence-oriented learning and student-centred learning, applying for and managing European research grants, etc. In addition, all new university-wide administrative services will need high levels of relevant competences in order to deliver a much needed superior service, which provides greater value to both the central university and decentralised structural units.

8. Conclusions

Many of the issues identified by the team during the external element of the institutional evaluation of UNIZG had already been identified in the self-evaluation report, and indeed in earlier evaluations of the university. This new IEP evaluation therefore serves primarily to underline the on-going strategic importance of these reforms.

This report has set out a series of recommendations covering a number of main topics. It will be most important for the university to take this report and the recommendations, as well as the analysis undertaken in the university's own self-evaluation report, and ensure a full and frank discussion across the university and with a range of stakeholders regarding the contents of these reports.

It appeared from the team's many meetings that there was considerable awareness across the university of the need for UNIZG to change, and of the desirability of such change. Indeed, small elements of these changes have already begun through the efforts of the current Rectorate. However, it will still take considerable effort and conviction to ensure that these changes gain in momentum, continue to be implemented and for their positive effects to be felt. In the view of the IEP team, UNIZG's brighter future success depends on ensuring a faster and more coherent rate of change across the entire university.

The team hopes that its two visits to UNIZG and this external report can be useful to the university in its plans for on-going consolidation and strategic development. This report contains a number of critical observations and recommendations which are made from an external perspective, with the purpose of assisting the university to plan for its future. The team hopes that these will be found useful and will positively stimulate the on-going process of reform and change on which UNIZG has already embarked.