



**Report
of the Expert Panel
on the reaccreditation
of the University Postgraduate (Doctoral) Programme**

Forestry and Wood Technology

Faculty of Forestry, University of Zagreb

Date of the visit:

June 6th 2016

October 2016

CONTENTS

INTRODUCTION 3

SHORT DESCRIPTION OF THE STUDY PROGRAMME 6

RECOMMENDATION BY THE EXPERT PANEL TO THE ASHE'S ACCREDITATION COUNCIL..... 7

RECOMMENDATIONS FOR THE IMPROVEMENT OF THE STUDY PROGRAMME..... 7

ADVANTAGES OF THE STUDY PROGRAMME 8

DISADVANTAGES OF THE STUDY PROGRAMME 8

EXAMPLES OF GOOD PRACTICE 9

COMPLIANCE WITH THE PRESCRIBED CONDITIONS FOR THE DELIVERY OF A STUDY PROGRAMME..... 9

QUALITY ASSESSMENT 11

INTRODUCTION

The Expert Panel appointed by the Agency for Science and Higher Education (ASHE) created this Report on the Re-accreditation of the University Postgraduate (Doctoral) Programme *Forestry and Wood Technology* on the basis of the Self-Evaluation Report of the Programme, other documentation submitted and a visit to the *Faculty of Forestry, University of Zagreb*, which delivers the Programme.

The Agency for Science and Higher Education (ASHE), a public body listed in EQAR (European Quality Assurance Register for Higher Education) and a full member of ENQA (European Association for Quality Assurance in Higher Education), re-accredits higher education institutions (hereinafter: HEIs) and their study programmes in line with the Act on Quality Assurance in Science and Higher Education (Official Gazette 45/09) and the Ordinance on the Content of a Licence and Conditions for Issuing a Licence for Performing Higher Education Activity, Carrying out a Study Programme and Re-Accreditation of Higher Education Institutions (OG 24/10). In this procedure parts of activities of higher education institutions and university postgraduate study programmes are re-accredited.

Expert Panel is appointed by the Agency's Accreditation Council, an independent expert body, to carry out independent evaluation of post-graduate university study programmes.

The Report contains the following elements:

- Short description of the study programme,
- The recommendation of the Expert Panel to the Agency's Accreditation Council,
- Recommendations for institutional improvement and measures to be implemented in the following period (and checked within a follow-up procedure),
- A brief analysis of the institutional advantages and disadvantages,
- A list of good practices found at the institution,
- Conclusions on compliance with the prescribed conditions of delivery of a study programme,
- Conclusions on compliance with the criteria for quality assessment.

Members of the Expert Panel:

1. Professor Marketta Sipi, Faculty of Agriculture and Forestry, University of Helsinki, Republic of Finland,
2. Professor Jürgen Pretzsch, Dresden University of Technology, Federal Republic of Germany,
3. Hynek Roubík, doctoral candidate, Faculty of Tropical AgriSciences, Czech University of Life Sciences Prague, Czech Republic,
4. Professor Hans Thordal-Christensen, Department of Plant and Environmental Sciences, University of Copenhagen, Kingdom of Denmark,
5. Vesna Miličič, PhD, Biotehnoška fakulteta, Univerza v Ljubljani, Republic of Slovenia,
6. Prateek Mahalwar, doctoral candidate, Max Planck Institute for Developmental Biology, Tuebingen, Federal Republic of Germany,
7. Professor Claes Niklasson, Chalmers University of Technology, Kingdom of Sweden,
8. Professor Colette Fagan, University of Reading, United Kingdom of Great Britain and Northern Ireland,
9. Professor Susanne Knøchel, Faculty of Science University of Copenhagen, Kingdom of Denmark,
10. Kathirvel Alagesan, doctoral candidate, Max Planck Institute of Colloids and Interfaces, Federal Republic of Germany.

The higher education institution was visited by the following Expert Panel members:

- Professor Marketta Sipi, PhD,
- Professor Jürgen Pretzsch, PhD,
- Hynek Roubík, doctoral candidate.

In the analysis of the documentation, site visit and writing of the report the Panel was supported by:

- Mia Đikić, coordinator, ASHE,
- Ivana Rončević, interpreter at the site visit and translator of the Report, ASHE.

During the visit to the Institution the Expert Panel held meetings with the representatives of the following groups:

- Management,
- Study programme coordinator,
- Doctoral candidates,
- Teachers and supervisors,
- Alumni,

- Stakeholders.

The Expert Panel also had a tour of the Faculty of Forestry.

SHORT DESCRIPTION OF THE STUDY PROGRAMME

Name of the study programme: *Forestry and Wood Technology*

Institution providing the programme: University of Zagreb

Education provider(s): Faculty of Forestry

Place of delivery: Faculty of Forestry, University of Zagreb, Svetošimunska 25, 10 000, Zagreb

Scientific area and field: Scientific area of biotechnical sciences; field of forestry and field of wood technology

Learning outcomes of the study programme:

The learning outcomes of doctoral study programmes enable doctoral candidates to acquire knowledge, skills and competences upon completion of doctoral study programmes. The doctoral candidates are trained to:

- assess and analyse different research theories, methods and procedures, and conduct internationally recognized research projects;
- formulate research problems, select scientific equipment, instruments and tools for analyses in the scientific field of forestry and scientific field of wood technology, as well as plan and conduct research at the highest scientific level that is recognized in the international scholarly community;
- select suitable computer programmes and statistical data analyses and make conclusion on the basis of obtained results;
- evaluate strengths and weaknesses of relevant scientific methods;
- plan and conduct original scientific research which will lead to new insights and which can be published in the form of scholarly papers in internationally recognized journals from the field of research;
- critically re-evaluate and assess scientific results of research in their field;
- plan and conduct research with ethical moral and professional integrity, as well as identify and evaluate ecological and ethical issues in their field of research;
- assess risks of their work from the aspect of health, safety and ecology;
- publish scientific research in relevant national and international sources, participate in scholarly discussions at international conferences, and present and promote the results of their research work to business and public sectors, but also to the wider public; and

- disseminate scientific insights and use scientific arguments to communicate with colleagues, the broader scholarly community and wider social environment about their field of expertise.

Number of doctoral candidates: 12. Other 32 doctoral candidates are enrolled in the programmes of previous doctoral studies, making a total of **44** doctoral candidates.

Number of teachers: 54

Number of supervisors: 73

RECOMMENDATION BY THE EXPERT PANEL TO THE ASHE'S ACCREDITATION COUNCIL

Upon the completion of the re-accreditation procedure and the examination of the materials submitted (Self-Evaluation Report etc.), the visit to the higher education institution and interviews with HEI members in accordance with the visit protocol, the Expert Panel renders its opinion in which it recommends to the Accreditation Council of the Agency the following:

Issue a confirmation on compliance for performing parts of activities (renew the licence)

RECOMMENDATIONS FOR THE IMPROVEMENT OF THE STUDY PROGRAMME

1. More documents should be written in English and the HEI should ensure a better website in English in order to promote internationalisation.
2. The HEI should ensure more papers to be published in international high quality journals. One of the prerequisites for the completion of the study programme should be the presentation of one accepted research paper in a journal with IF/SJR written in English or another international language. More international cooperation, participation in international projects and presence at international conferences is required. If the doctoral theses are published as monographs, they should be mostly written in English. Part of the thesis and research should be done abroad at some other university or research centre.
3. An advisory board should be established, of which the faculty staff and a broad stakeholder group, involving the private sector, government institution and NGOs members would be members. It should have the task of strategically developing the programme, taking into account the labour market, qualifications of applicants and graduates as well as the overall quality of the study programme. HEI should encourage more interactions, colloquia, workshops and cooperation among the students in order to ensure the quality of the programme. Higher

involvement of students in the decision making-processes leads to more innovation in course development.

4. The programme should be more open to other disciplines within and outside the university.
5. An Alumni network should be created to keep in touch with graduates employed in different companies and to create communication and synergies between alumni post-docs and present PhD students.

ADVANTAGES OF THE STUDY PROGRAMME

1. Laboratories, the equipment, the building and the overall infrastructure are really good.
2. Positive working environment, friendly atmosphere.
3. Abundant knowledge is created and transferred.
4. Alumni and employers have a positive attitude towards the programme and they are satisfied with the qualifications of the graduates.
5. Supervision resources are adequate.

DISADVANTAGES OF THE STUDY PROGRAMME

1. The level of internationalization of the programme as well as the number of international students is low. There are also just a few international projects, and practical cooperation is not developed.
2. There is a lack of interdisciplinary in teaching and research. An interdisciplinary focus is essential in modern research on forestry and forest products.
3. With the planned three years, the doctoral programme is too short, while one year is dedicated to course work. The research subject can be selected by the end of the second semester, which reduces the time for research even more. It is difficult for the candidates to get deeply involved in their research subject and as a consequence most of the theses are monographs, because journal article-based theses take more time to develop.
4. The teaching load of the students is quite high (classes take 20 % of the overall programme), especially with regard to the overall PhD cycle. The number of applications to the programme is low and even decreasing. All applicants to the PhD programme are admitted so the selection of the best candidates does not take place.
5. Administrative procedures and the respective workload are too time-consuming.

EXAMPLES OF GOOD PRACTICE

1. There are procedures that assure academic integrity.
2. The process of developing and defending the thesis is transparent and includes a public presentation (*viva*).
3. Doctoral thesis assessment is done by high-level scientists and an independent committee.
4. Students are informed about their rights and obligations.

COMPLIANCE WITH THE PRESCRIBED CONDITIONS FOR THE DELIVERY OF A STUDY PROGRAMME

Minimal legal conditions:	YES/NO Notes
1. Higher education institution (HEI) is listed in the Register of Scientific Organisations in the scientific area of the programme, and has a positive reaccreditation decision on performing higher education activities and scientific activity.	YES
2. HEI delivers programmes in the two cycles leading to the doctoral programme, i.e., first two cycles in the same area and field/fields (for interdisciplinary programmes), and employs a sufficient number of teachers as defined by Article 6 of the Ordinance on the Content of a Licence and Conditions for Issuing a Licence for Performing Higher Education Activity, Carrying out a Study Programme and Re-Accreditation of Higher Education Institutions (OG 24/10).	YES
3. HEI employs a sufficient number of researchers, as defined by Article 7 of the the Ordinance on Conditions for Issuing Licence for Scientific Activity, Conditions for Re-Accreditation of Scientific Organisations and Content of Licence (OG 83/2010).	YES
4. At least 50% of teaching as expressed in norm-hours is delivered by teachers employed at the HEI (full-time, elected into scientific-teaching titles).	YES
5. Student: teacher ratio at the HEI is below 30:1.	YES
6. HEI ensures that doctoral theses are public.	YES
7. HEI launches the procedure of revoking the academic title if it is determined that it has been attained contrary to the conditions stipulated for its attainment, by severe violation of the studying rules or based on a doctoral thesis (dissertation) that has proved to be a plagiarism or a forgery according to provisions of the statute or other enactments.	YES
Additional/ recommended conditions of the ASHE Accreditation Council for passing a positive opinion	YES/NO notes
1. HEI (or HEIs in joint programmes) has at least five teachers appointed to scientific-teaching titles in the field, or fields	YES

relevant for the programme involved in its delivery.	
2. In the most recent reaccreditation, HEI had the standard Scientific and Professional Activity (e.g. Artistic for those in the arts field) marked as at least "partly implemented" (3).	YES "mostly implemented" (4)
3. The doctoral programme is aligned with the HEI's research strategy.	YES
4. The candidate : supervisor ratio at the HEI is not above 3:1.	YES
5. All supervisors meet the following conditions: a) PhD, elected into a scientific title, holds a scientific or a scientific-teaching position and/or has at least two years of postdoctoral research experience; b) active researcher in the scientific area of the programme, as evidenced by publications, participation in scientific conferences and/or projects in the past five years (table 2, Supervisors and candidates); c) confirms feasibility of the draft research plan upon admission of the candidate (or submission of the proposal); d) ensures the conditions (and funding) necessary to implement the candidate's research (in line with the draft research plan) as a research project leader, co-leader, participant, collaborator or in other ways; e) trained for the role before assuming it (through workshops, co-supervisions etc.); f) received a positive opinion of the HEI on previous supervisory work.	YES For the most part positively identified during site-visit or confirmed by partners Individual funding options could not be assessed based on the existing documents
6. All teachers meet the following conditions: a) holds a scientific or a scientific-teaching position; b) active researcher, recognized in the field relevant for the course (table 1, Teachers).	YES
7. The supervisor normally does not participate in the assessment committees.	YES
8. In the programme it is assumed that all candidates spend at least three years doing independent research (while studying, individually, within or outside courses), which includes writing the thesis, publishing, participating in international conferences, field work, attending courses relevant for research etc.	YES but often not realistic
9. For joint programmes and doctoral schools (at the university level): cooperation between HEIs is based on adequate contracts; joint programmes are internationally recognized, and delivered in cooperation with accredited HEIs; the HEI delivers the programme within a doctoral school in line with the regulations (it is based on contracts in the case of multiple institutions, and the HEIs ensure good reaccreditation aimed at supporting the candidates); at least 80% of courses are delivered by teachers employed at HEIs within the consortium.	NOT APPLICABLE

QUALITY ASSESSMENT

	Quality assessment (“high level of quality” or “improvements are necessary”) and the explanation of the Expert Panel
1. RESOURCES: TEACHERS, SUPERVISORS, RESEARCH CAPACITIES AND INFRASTRUCTURE	
1.1. HEI is distinguished by its scientific/ artistic achievements in the discipline in which the doctoral study programme is delivered.	Improvements are necessary. Achievements in some disciplines are excellent. International networks are very limited. The Faculty should have international focus. A limited number of international publications and limited networks have a negative impact on excellence.
1.2. The number and workload of teachers involved in the study programme ensure quality doctoral education.	Improvements are necessary. The teaching programme is mostly delivered by the own faculty (over 50 %), but it would be useful and interesting to have more teachers from outside the faculty/university.
1.3. The teachers are highly qualified researchers who actively engage with the topics they teach, providing a quality doctoral programme.	Improvements are necessary. There were a few international papers and most of them were written in Croatian. It was difficult to evaluate the quality of the papers. The research outcomes should be mostly published in international journals written in English/or another international language.
1.4. The number of supervisors and their qualifications provide for quality in producing the doctoral thesis.	Improvements are necessary. The number of supervisors is sufficient. Diversity is quite high – some are very good and others not. Monitoring is not very strict. Involvement of more international researchers and the integration in respective research is needed.
1.5. The HEI has developed methods of assessing the qualifications and competencies of teachers and supervisors.	Improvements are necessary. The formal system exists, but is it not clear to what extent it is working. Although the staff has a heavy administrative workload to handle, there is a lack of statistical data about the quality of supervision and the drop out of PhD students. Just a five-year check on the national level is available.

<p>1.6. The HEI has access to high-quality resources for research, as required by the programme discipline.</p>	<p>Improvements are necessary. There is a lack of research projects. Infrastructure and equipment seem to be functional. Laboratories are certified. Support mechanisms for research projects are not well developed. The access to scientific data basis is provided.</p>
<p>2. INTERNAL QUALITY ASSURANCE OF THE PROGRAMME</p>	
<p>The HEI has established and accepted effective procedures for proposing, approving and delivering doctoral education. The procedures include identification of scientific/ artistic, cultural, social and economic needs.</p>	<p>Improvements are necessary. The need for a PhD programme is clearly documented. The programme fully complies with the legal requirements (at the level of the University). Under the present Faculty regulations it is not possible to do a PhD in three years. It is for example much too late to select the PhD topic at the end of the first year.</p>
<p>2.1. The programme is aligned with the HEI research mission and vision, i.e. research strategy.</p>	<p>Improvements are necessary. The programme is aligned with the HEI research strategy, mission and vision, but the specific strategy should be elaborated in cooperation with key stakeholders.</p>
<p>2.2. The HEI systematically monitors the success of the programmes through periodic reviews, and implements improvements.</p>	<p>Improvements are necessary. There are many specific elements for monitoring, analysis and reporting, but they have to be better integrated in a consistent and at the same time simple overall monitoring system. At the Faculty level, feedback from all different stakeholder groups, involving the private sector and NGOs, is essential.</p>
<p>2.3. HEI continuously monitors supervisors' performance and has mechanisms for evaluating supervisors, and, if necessary, changing them and mediating between the supervisors and the candidates.</p>	<p>Improvements are necessary. Feedback is provided by current PhD candidates. Feedback from former candidates is not available and an Alumni network does not exist. More networking, discussion and communication on all level is necessary.</p>
<p>2.4. HEI assures academic integrity and freedom.</p>	<p>High level of quality. The Faculty has established rules and procedures which assure academic integrity (prevent plagiarism</p>

	and other forms of academic fraud).
2.5. The process of developing and defending the thesis proposal is transparent and objective, and includes a public presentation.	High level of quality. At least one member of the committee is external, coming from another institution. The defence is public and the Faculty publishes a defence protocol. HEI complies with all relevant rules.
2.6. Thesis assessment results from a scientifically sound assessment of an independent committee.	High level on quality. HEI complies with all relevant rules.
2.7. The HEI publishes all necessary information on the study programme, admissions, delivery and conditions for progression and completion, in accessible outlets and media.	Improvements are necessary. All the necessary information should be published on the website of the Faculty in English. More publicity in English language is necessary. At present the Faculty publishes all information only in Croatian.
2.8. Funds collected for the needs of doctoral education are distributed transparently and in a way that ensures sustainability and further development of doctoral education (ensures that candidates' research is carried out and supported, so that doctoral education can be completed successfully).	Improvements are necessary. There are University rules in place. However, private sector candidates are discouraged by the study fees. The support from the private sector is limited and not stable in time. International external research funding is scarce or nearly not existing.
2.9. Tuition fees are determined on the basis of transparent criteria (and real costs of studying).	Improvements are necessary. It was not clearly outlined how tuition fees are calculated, to what extent the university members are exempt from paying tuition fees and how the fees are used for PhD supervision. We recommend that the Faculty set a PhD fund where tuition fees as well as other available sources of funding that can be allocated for PhD students development (such as a part of third party funding) can be collected and then used based on determined criteria. These criteria should be applied to awarding high quality research by students as well as covering

	strategically determined activities aimed at improving internationalization and research impact.
3. SUPPORT TO DOCTORAL CANDIDATES AND THEIR PROGRESSION	
3.1. The HEI establishes admission quotas with respect to its teaching and supervision capacities.	<p>Improvements are necessary. The Faculty has abundant supervisor capacity. There is a limitation of a maximum of three candidates per supervisor. The low number of applications does not really permit a selection of the best candidates as nearly all applicants are admitted to the programme.</p> <p>More publicity for the programme, better funding and more attractive PhD subjects should be initiated which will increase the number of applications and the quality of the programme. It is suggested to ensure two supervisors per PhD-student; one supervisor and one co-supervisor.</p>
3.2. The HEI establishes admission quotas on the basis of scientific/ artistic, cultural, social, economic and other needs.	<p>Improvements are necessary. The admission quotas urgently need to be discussed with various stakeholders, involving the private sector, the industry and forestry institutes. Once established, the Advisory board should also be involved.</p>
3.3. The HEI establishes the admission quotas taking into account the funding available to the candidates that is, on the basis of the absorption potentials of research projects or other sources of funding.	<p>Improvements are necessary. Funding should not be an indicator for admission quota. Funding sources need urgently to be diversified and internationalized.</p>
3.4. The HEI should pay attention to the number of candidates admitted as to provide each with an advisor (a potential supervisor). From the point of admission to the end of doctoral education, efforts are invested so that each candidate has a	<p>Improvements are necessary. The whole structure of the PhD programme has to be revised. It is too late to present the research proposal at the end of the first year; it is suggested to put a valid research proposal as a pre-condition to access the PhD programme. Continuous common PhD colloquia facilitate the monitoring of the individual</p>

sustainable research plan and is able to complete doctoral research successfully.	research progress.
3.5. The HEI ensures that interested, talented and highly motivated candidates are recruited internationally.	Improvements are necessary. English publicity is completely lacking. PR, visibility, alumni network and the social media are not used. The Faculty does not try to recruit excellent foreign students, and the study documents as well as the module catalogue are not available and thus not published in English.
3.6. The selection process is public and based on choosing the best applicants.	Improvements are necessary. There is a strong imbalance between the high supervision capacity and the extremely low number of applicants. That is why the selection hardly happens; nearly all applicants are absorbed regardless of qualifications.
3.7. The HEI ensures that the selection procedure is transparent and in line with published criteria, and that there is a transparent complaints procedure.	Improvements are necessary. The selection procedure is clear and the applicants have the right to complain, but as nearly all applicants are selected there are no complains.
3.8. There is a possibility to recognize applicants' and candidates' prior learning.	High level on quality. On the programme level there is a possibility to recognize prior learning outcomes, treated on an individual level.
3.9. Candidates' rights and obligations are defined in relevant HEI regulations and a contract on studying that provides for a high level of supervisory and institutional support to the candidates.	High level on quality. Candidates and Alumni explained that they were well informed about their rights and obligations in the PhD process. It is not clear whether this is adequately documented.
3.10. There are institutional support mechanisms for candidates' successful progression.	Improvements are necessary. Strong support mechanisms were available for candidates from the university and state services. There should be better access for candidates from the private sector.

4. PROGRAMME AND OUTCOMES	
4.1. The content and quality of the doctoral programme are aligned with internationally recognized standards.	<p>Improvements are necessary. Just two years of independent research experience. There is a lack of interdisciplinary approaches, both in courses and thesis subjects. There is a lack of communication, partly with regard to languages. There is a lack of cooperation with other faculties. There is a lack of involvement in international projects and international cooperation.</p>
4.2. Programme learning outcomes, as well as the learning outcomes within it, are aligned with the level 8.2 of the CroQF. They clearly describe the competencies the candidates will develop during the doctoral programme, including the ethical requirements of doing research.	<p>Improvements are necessary. There is a strong time limit (only two years of research). There are not many opportunities to get practical experience in networks or research groups. There is only horizontal knowledge exchange. The competencies should be established and achieved through more of trends tracking and providing more actual and contemporary knowledge, as well as being involved more in multidisciplinary approaches.</p>
4.3. Programme learning outcomes are logically and clearly connected with teaching contents, as well as the contents included in supervision and research.	<p>Improvements are necessary. Learning outcomes are mainly focused on individual knowledge transfer. There is a strong individual supervision focus. More group work, exchange and knowledge sharing should be institutionalized by the introduction of common PhD colloquia and conferences.</p>
4.4. The doctoral programme ensures the achievement of learning outcomes and competencies aligned with the level 8.2 of the CroQF.	<p>Improvements are necessary. All the theses are written in the Croatian language (only national transfer knowledge is possible).</p>
4.5. Teaching methods (and ECTS, if applicable) are appropriate for level 8.2 of the CroQF and assure achievement of clearly defined learning outcomes.	<p>Improvements are necessary. Module catalogue was not available in English. A large number of individual selective courses are available; 46 courses in total. This is positive because of the multitude of subjects offered, but it is time consuming and does not facilitate group work. Stronger course integration might be useful and less</p>

	time consuming.
4.6. The programme enables acquisition of general (transferable) skills.	<p>Improvements are necessary.</p> <p>Hardly any courses on general skill are offered at the Faculty. Students mostly participate in courses outside the Faculty, at the University level. It is suggested to offer more courses at the faculty level, which would also increase interdisciplinary thinking and facilitate group work.</p>
4.7. Teaching content is adapted to the needs of current and future research and candidates' training (individual course plans, generic skills etc.).	<p>High level on quality.</p> <p>There are a small number of compulsory courses and high number of elective modules. Elective courses make it possible to adapt to students' research plans.</p>
4.8. The programme ensures quality through international connections and teacher and candidate mobility.	<p>Improvements are necessary.</p> <p>There is limited international networking. Conditions for foreign students, including the language, are not favourable. Mobility is low in case of teaching assistants, because they have a heavy teaching workload. Reciprocity lacks in international exchange as there are no courses delivered in English.</p>

*** NOTE: RECOMMENDATIONS OF THE EXPERT PANEL TO THE ASHE'S ACCREDITATION COUNCIL AND QUALITY LABEL**

The role of the Expert Panel in the re-accreditation of doctoral study programmes is manifold. The Expert Panel or part of the Expert Panel visiting a higher education institution drafts a report on the basis of a self-evaluation report, the accompanying relevant documentation, and a site visit to HEI. The draft report is adopted by all members of the Cluster Expert Panel, while the president of the Cluster Expert Panel is responsible for coordinating the assessment levels.

The report contains an assessment on whether a doctoral study programme delivered at a higher education institution complies with the prescribed laws and by-laws, as well as any additional/recommended requirements defined by the Agency's Accreditation Council, and whether a higher education institution can obtain a positive, i.e. satisfactory quality assessment according to the criteria set out in this document. Moreover, the Expert Panel must make recommendations for quality improvement.

Based on the assessment of all these elements, the Expert Panel may propose to the Accreditation Council of the Agency to issue either a confirmation on compliance, a letter of expectation for the period up to three (3) years in which period the higher education institution should eliminate the identified deficiencies, or to deny the license.

If the Expert Panel has assessed that a doctoral study programme delivered by a higher education institution does not meet legal and other requirements or that the quality of a study programme is not ensured (i.e. that HEI does not meet additional requirements or recommendations made by the Accreditation Council, or has a very poor quality assessment), they should propose to the Accreditation Council to deny the license.

If the Expert Panel considers that the relevant laws and bylaws have been met by a higher education institution, but that certain elements mentioned above do not meet the quality requirements, while they consider that the identified shortcomings can be corrected within a time frame of three years, they should issue a letter of expectation.

If the Expert Panel considers that all legal and additional/recommended requirements have been met and the quality assessment is satisfactory, i.e. that a study programme fulfils the learning outcomes appropriately defined for that level and scientific area, they may propose the issuance of a certificate and have a HEI commit to quality improvement and reporting to the Agency during the follow-up period.

Finally, if the Expert Panel has, in accordance with the criteria mentioned above, proposed issuing the certificate of compliance and assessed that, in addition to meeting the minimum quality requirements – i.e. the qualification framework level - for a study programme, the programme should be identified as a doctoral programme of a 'high level of quality', the Expert Panel may propose to the Agency's Accreditation Council that such a doctoral study programme be awarded the 'high quality label'. Thus the Agency, with the consent of the

Accreditation Council, grants a higher education institution the right to use the label for their academic and promotional purposes.

The 'high quality label' cannot be proposed or awarded to a programme or a higher education institution that does not comply with the requirements laid down by the laws and bylaws mentioned in this document, and any additional requirements recommended by the Accreditation Council. Moreover, the quality assessment awarded to a study programme should reflect a high level of quality inasmuch that at least half of the sub-criteria in each of the quality assessment criteria are assessed as being of high quality. The Accreditation Council of the Agency issues a final opinion on the label awarded. The content and form of the quality labels shall be prescribed by the Agency in a relevant general act.

The Accreditation Council of the Agency discusses the final report with all recommendations and suggestions, and issues their opinion on the report. Based on a prior opinion of the Accreditation Council, the Agency issues an Accreditation Recommendation to the minister responsible for science and higher education, and upon receipt of the minister's final decision on the outcome of the procedure, awards the 'high quality label' to a higher education institution.