Study on the Impact of ASIIN's Programme Accreditation

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INTRODUCTION

PROGRAMME ACCREDITATION AT ASIIN

ASIIN understands "education" as both a learning and development process. For this reason, ASIIN pursues the goal of strengthening and securing the quality of academic education as well as establishing transparency concerning the achieved quality of academic education. As an accreditation agency, ASIIN understands that its ways of operation assume responsibility for the quality of higher education programmes. Consequently, over the course of the past two decades, ASIIN has established a comprehensive system of quality management procedures, which are documented in the ASIIN quality assurance handbook. Other important features of ASIIN's quality insurance culture are grounded in our refined system of checks-and-balances, in a highly participatory culture of engagement with our stakeholders as well as two-hundred voluntary representatives in various committees and accreditation bodies. ASIIN also regularly organizes national and international conferences, which focus on the further development of the system of accreditation and the impact of our activities. As regards Criteria 3.4 of the Standards and Guidelines for Quality Assurance in the European Higher Educational Area (Thematic Analysis), ASIIN is continuously evaluating and analysing its accreditation procedures and has commenced to publish these findings In a series of impact studies in a more systematic manner. In doing so, ASIIN also has taken into account the nation-wide statistical analysis of the German accreditation council that evaluated the practice of issuing requirements and recommendations by licensed German accreditation agencies in a comparative survey. This study allowed ASIIN to compare its accreditation practices to that of other German agencies. One of the major findings of this national study has been, that compared to all other agencies, ASIIN follows a very thorough requirement practice.

For ASIIN, programme accreditations have at its core the fundamental objective to secure and further the academic quality of the study programme and hence to improve the academic,

practical, social and personal skills of each individual student. ASIIN achieves this objective by following an approved procedure that is based upon a set of criteria, which study programmes have to fulfil in order to be accredited. During the procedures, the most suitable experts are selected through a refined procedure to assess the quality of a study programme following these criteria and to disclose where criteria are not or are only partially fulfilled.

ASIIN is operating with two quality criteria sets. On the one hand, ASIIN awards the label of the German Accreditation Council (AC) and as such has to review compliance with the criteria of the AC. Based on the results of this evaluation, requirements are issued that the HEIs must meet as a minimum to obtain accreditation status of their programmes. Additionally, ASIIN has developed field-specific criteria for its various subject areas, such as Mechanical Engineering, Process Engineering, Electrical Engineering, Information Technology, Informatics/Computer Sciences, Civil Engineering, Geodesy, Architecture, Physical Technology, Materials and Processes, Industrial Engineering, Business Informatics, Agriculture, Nutritional Science, Natural Science, Life Science, Pharmacy, Chemistry, Mathematics and Physics. These subject-specific criteria need to be fulfilled to attain an additional ASIIN-label/European quality label. The latter applies, when ASIIN accredits international study programmes.

GOALS OF THIS STUDY

This study is designed to evaluate the overall impact ASIIN's accreditation procedures has had on higher educational institutions as well as whether ASIIN fulfils its objectives of securing and advancing the quality of academic education nationally and internationally, which are anchored in its articles of association. To this end, this impact analysis has been conceptualized and conducted by analysing a sample of altogether 223 study programmes that were accredited from January 1, 2017 to December 31, 2017. The year 2017 has been chosen as it is the most recent year for which ASIIN has a complete amount of data of its accreditation procedures and the last year for which all accreditation procedures follow the criteria and guidelines preceding the fundamental changes in the German accreditation system. As such, the year 2017 has been identified as being particularly suited for our purposes.

As regards the structure of the following parts, this study first presents general statistical data concerning the number of accreditation procedures, the respective share of first-time accreditations vs. reaccreditations, the involved Technical Committees, as well as the overallresults of the accreditation procedures. The second part of the study focuses on a critical reflexion of the various requirements set by the Accreditation Council on the one hand and the ASIIN-standards on the other hand. In addition, we are using analytical dichotomies of distinct categories comparing the accreditation decisions related to first-time accreditations vs. reaccreditations, national vs. international procedures, and the distribution of the criteria across these distinct foci.

The results of this study not only serve to display ASIIN's practice to external stakeholders, but they also enhance the internal quality of the agency. Thus, this study aims at learning lessons for ASIIN's own internal ways of operations and at discussing the impact of our workings on an empirical basis with our stakeholders. To this end, we are presenting these findings to a joint meeting of the ASIIN Accreditation Commission with our 13 Technical Committees, which will take place on December 6 to December 7, 2018.

ANALYSIS OF ACCREDITATION PROCEDURES IN 2017

STATISTICAL OVERVIEW OF ACCREDITATION PROCEDURES

In the consulted period of January 1, 2017 to December 31, 2017, ASIIN has conducted 87 accreditation procedures and has evaluated 223 study programmes in total. On average, every accreditation procedure entailed 2.54 study programmes, while regularly ASIIN attempts clustering similar programmes to achieve efficient and profound evaluations.

ASIIN's internal structure consists of 13 technical committees that are responsible for the accreditation of those study programmes within their field of expertise. The technical committee Informatics/Computer Sciences has been responsible for the highest share of accreditation decisions (51), followed by Mechanical Engineering/Process Engineering (46), and Electrical Engineering/Information Technology (39).

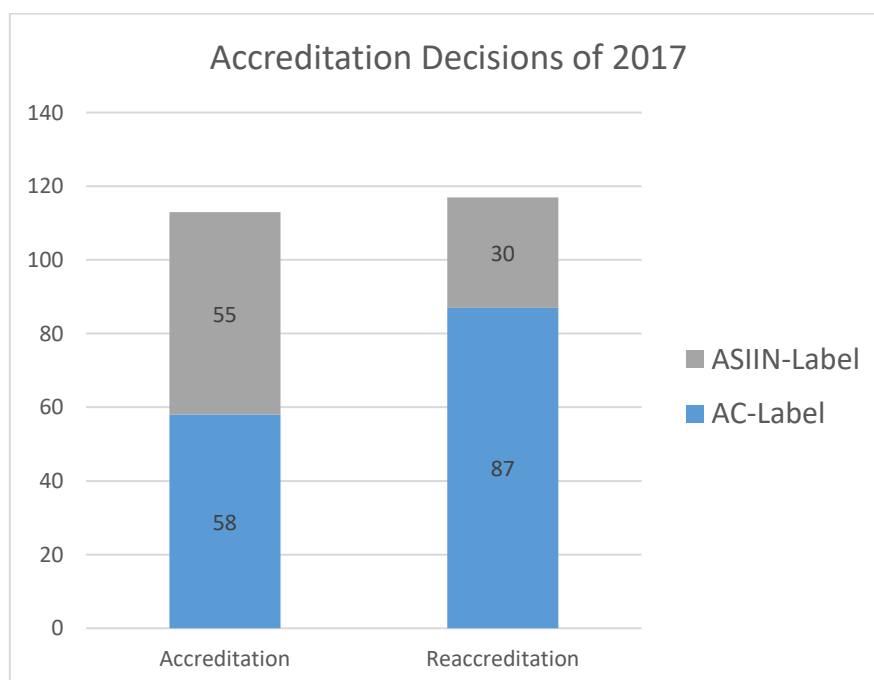Distribution of Accreditation Decisions across the Technical Committees
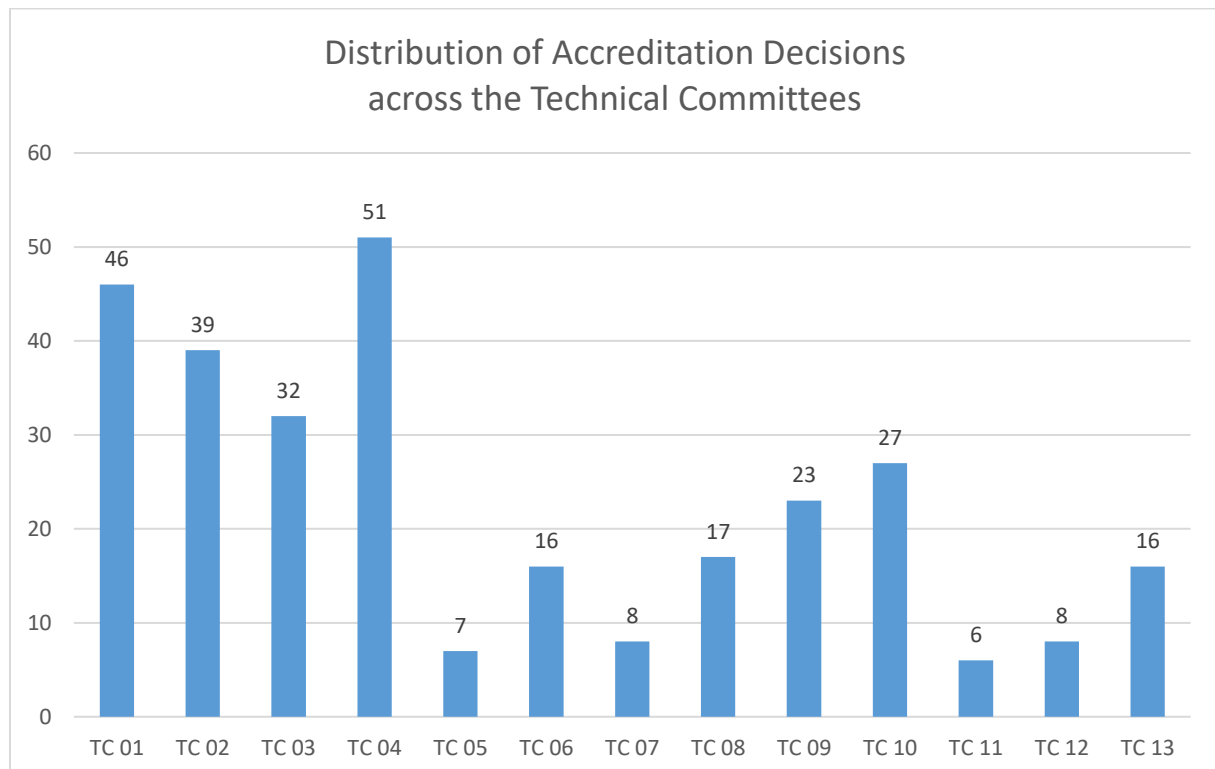
TC 01-Mechanical Engineering/Process Engineering; TC 02-Electrical Engineering/Information Technology; TC 03-Civil Engineering, Geodesy and Architecture; TC 04-Informatics/Computer Science; TC 05-Physical Technologies, Materials and Processes; TC 06-Industrial Engineering; TC 07-Business Informatics/ Information Systems; TC 08-Agriculture, Nutritional Sciences and Landscape Architecture; TC 09-Chemistry; TC 10-Life Sciences; TC 11-Geosciences; TC 12-Mathematics; TC 13-Physics

Study on the Impact of ASIIN's Programme Accreditation

While ASIIN has evaluated 223 study programs in the year 2017, its experts and commissions have made 230 individual decisions. This difference of 8 originates from 8 study programmes that have applied for the awarding of both the AC- and the ASIIN-label. While German higher education institutions can be awarded both labels, internationally, only the ASIIN-label applies. As such, of all 85 decisions related to the delivery of the ASIIN-label, 8 concerned German HEIs and 77 concerned international HEIs, which sums up to 90,5% of all procedures concerning the ASIIN-label having been undertaken at international HEIs. In 2017, those procedures include HEIs in Finland, Kazakhstan, Mexico, Mongolia, Northern Cyprus, Peru, Slovenia and Namibia. With the exception of Finland, all other countries are up-and-coming nations. As education plays a key role in a nation's development, ASIIN's accreditation procedures support the quality of education and as such, the evolvement of these nations in the long-term.

Of those 230 accreditation decisions, 113 have been first-time accreditation and 117 have been reaccreditations. Of those 133 first-time accreditations, a nearly equal number have requested the AC-label (58) and the ASIIN-label (55). This demonstrates, that ASIIN´s services are requested both nationally and internationally. As regards these 117 reaccreditations, 87 have requested the AC-label, while a much lower number, 30, having requested the ASIIN-label. This stems from the fact that ASIIN has started out as a nationally operating accreditation agency and only within the last decade has branched out its practice of quality assurance to other countries.


DISTRIBUTION OF ACCREDITATION DECISIONS

Every accreditation procedure can have any one of four outcomes: denial of the accreditation, suspension of the accreditation, accreditation with requirements for one year,

accreditation without requirements. In the studied time-frame, ASIIN's accreditation commission has decided upon suspension in 7 cases (3%), accreditation with requirements in 204 (88.8%) and accreditation without requirements in 19 cases (8.2%).

Taking into consideration those decisions that led to an accreditation of the study programme, 91.2% of all study programmes are thus accredited with requirements. This indicates that study programmes – even in their second or third accreditation – still fall short in some of the set criteria, but equally is a testimony to ASIIN's thorough and responsible practice of peer review. As most of these study programs tend to fulfil their requirements in due time, thus earning accreditation for the full time-frame, ASIIN is instrumental in enhancing the quality of over 90% of all study programs, while ensuring that every single study program continues its high standard of quality education. With 91,5% of study programs being accredited with requirements, it is worthwhile to assess the nature of these requirements, which at their core are responsible for enhancing the quality of the examined HEIs.
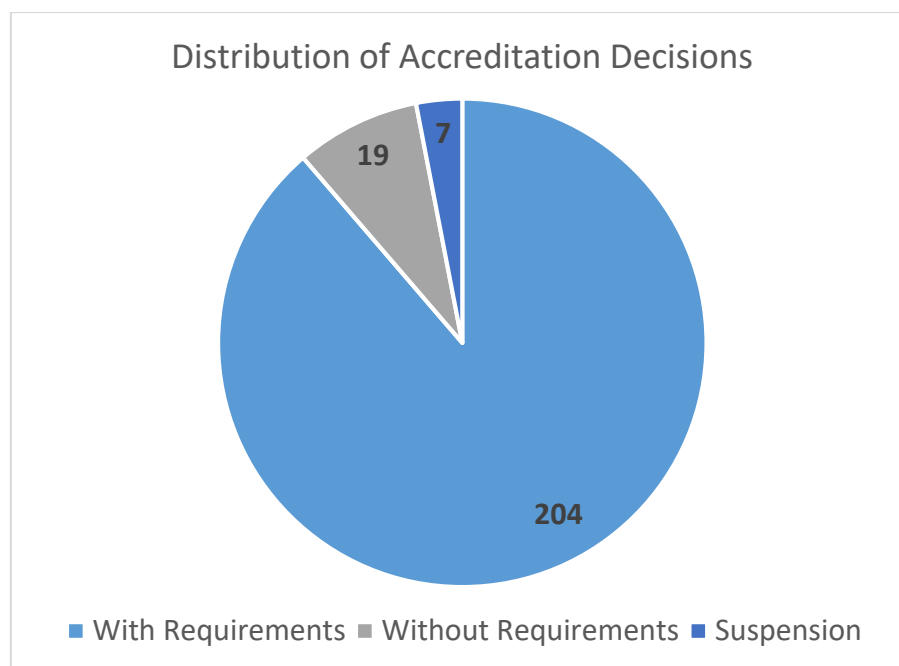

DISTRIBUTION OF CRITERIA ACROSS REQUIREMENTS

Requirements and recommendations are the tools with which ASIIN indicates a lack of quality in certain areas of the study programmes. While implementation of recommendations in the former system have to be demonstrated at the time of the reaccreditation visit, requirements are mandatory and the HEIs must fulfil them in order to extend their accreditation to the full period of either 5 or 7 years (in the new German accreditation system 8 years), depending whether it is a first-time accreditation or a reaccreditation respectively. An analysis of the

imposed recommendations will thus disclose two important results: The areas in which the accredited study programs fell short and the areas in which accreditation through ASIIN consequently served to enhance the quality of these study programmes.

DISTRIBUTION OF REQUIREMENTS: AC-LABEL

AC-Label: Distribution of Requirements across Criteria

■ Share of Accr.   ■ Share of Reacc.
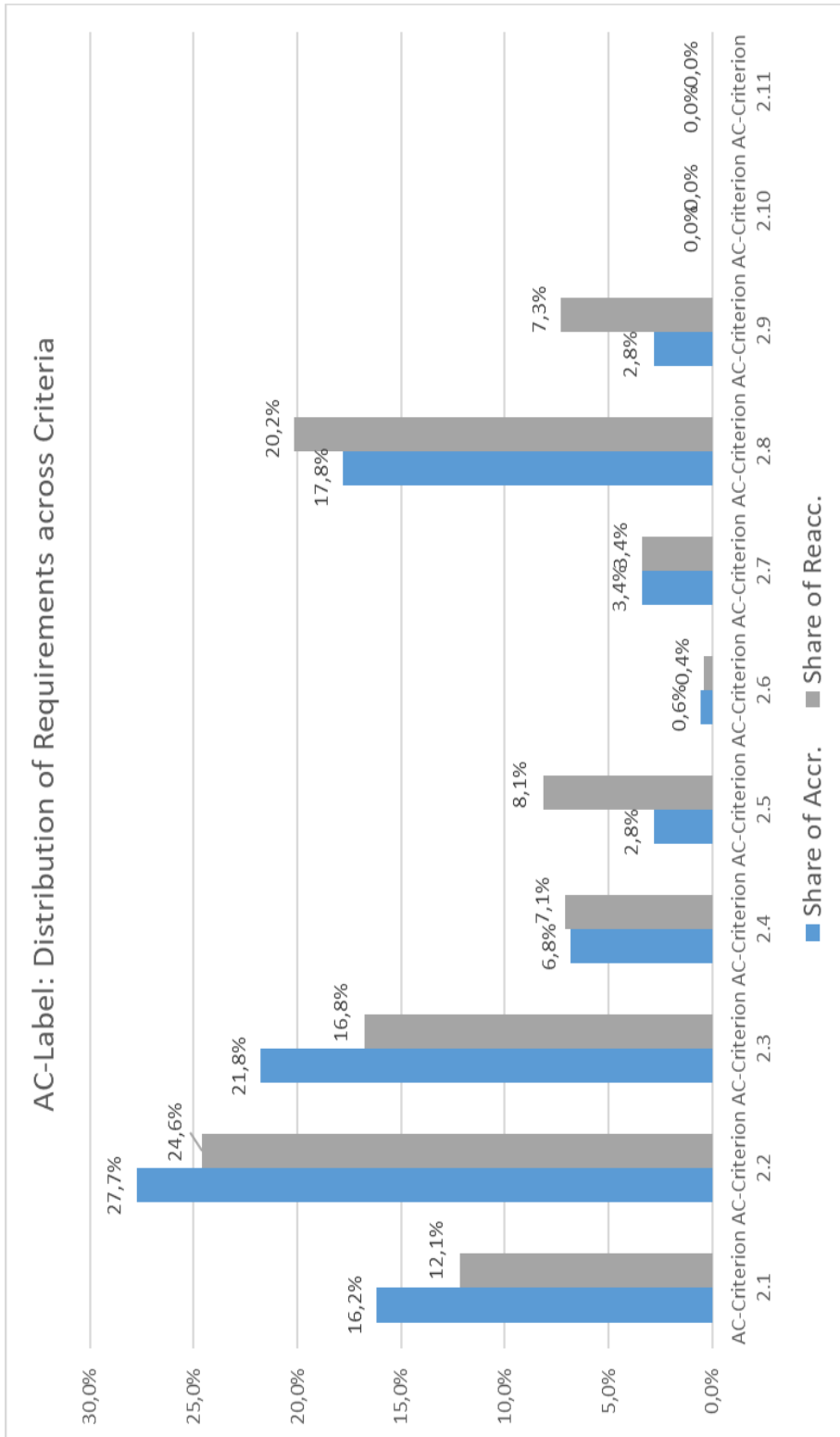
2.1-Qualification Goals of the Study Programmes Concept; 2.2 Conceptual Classification of the Study Programme within the Study System; 2.3-Concept of the Study Programme; 2.4-Studyability of the Programme; 2.5-System of Examination; 2.6-Programme-related Cooperation; 2.7-Ressources; 2.8-Transparency and Documentation; 2.9-Quality Management and Development; 2.10-Study Programmes with Special Profile Requirements; 2.11-Gender Equality and Equal Opportunities

The statistics above shows the distribution of the requirements across the eleven criteria that the German Accreditation Council has set for awarding of the AC-label. In total, it becomes clear that criterion 2.1 (Qualification Goals of the Study Programmes) criterion 2.2. (Conceptual Classification of the Study Programme within the Study System), criterion 2.3 (Concept of the Study Programme) and criterion 2.8 (Transparency and Documentation) hold the most requirements, with criterion 2.2 holding the most requirements in both first-time accreditations and reaccreditations.
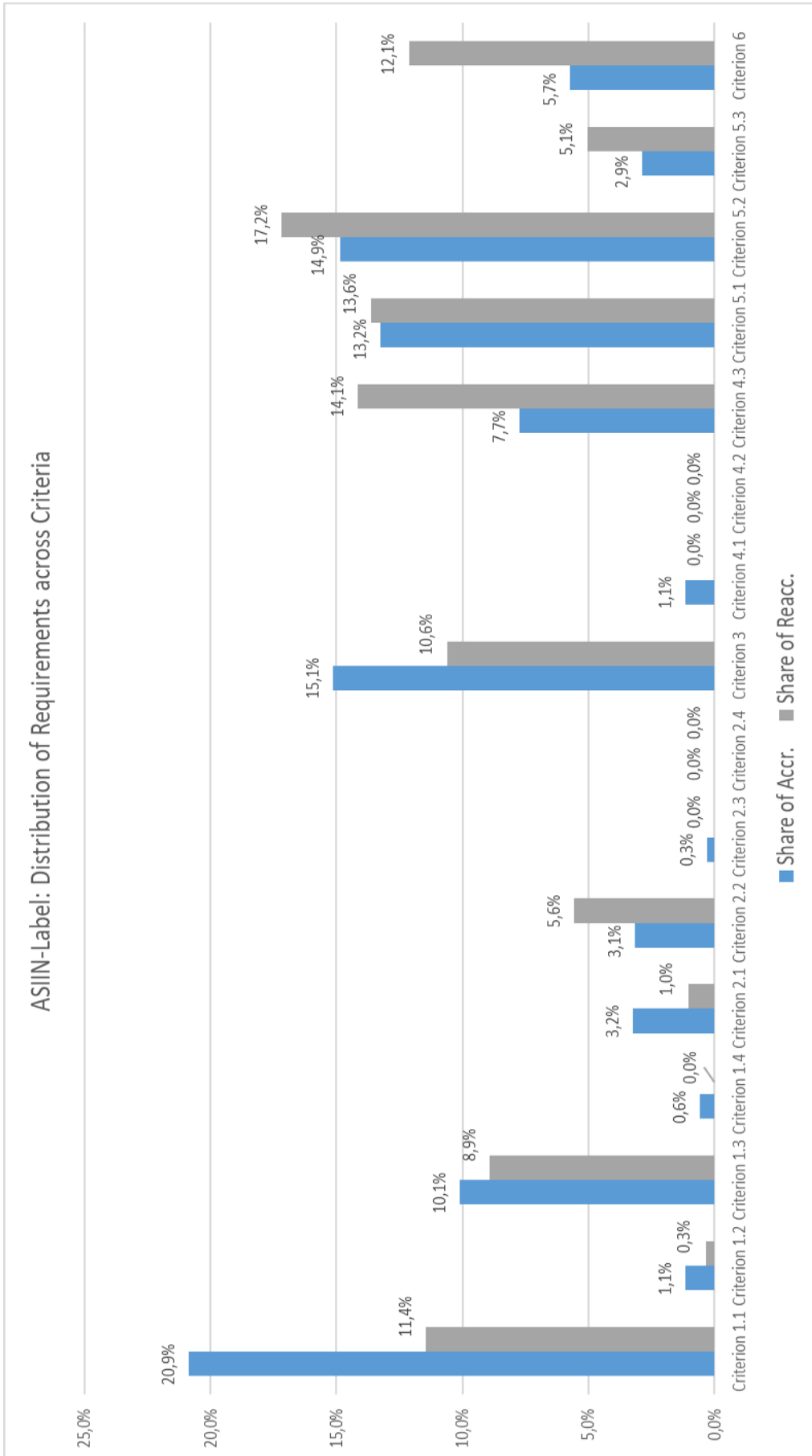
Criterion 2.1, 2.2. and 2.3 can be regarded as "formal criteria" as they control the qualification goals of the study programme (2.1), monitor if the study programme is in line with the German national qualification framework and the structural requirements of the German federal states (2.2) and inspect the concept of the study programme including the taught knowledge and competences, formal rules related to the set-up of the modules, the entry requirements and transfer of academic achievements. It shows that HEIs are still wrestling with implementing formal requirements set by the standing conference of the ministers of education and cultural affairs (KMK). There is, however, a learning curve to be observed. The latter becomes especially visible when taking into consideration that criterion 2.1, 2.2. and 2.3 show a drop in imposed requirements between first-time accreditation and reaccreditation and thus exemplify that accreditation clearly enhances the quality of study programmes.

While those three criteria show a drop in imposed requirements between first-time accreditations and reaccreditations, criterion 2.5, 2.8 and 2.9 display the opposite trend. While criterion 2.8 – Transparency and Documentation – shows a slight increase of 2.5%, criterion 2.5 (System of Examination) and 2.9 (Quality Management and Development) show an increase of more than 6%. Thus, it appears that German HEIs have difficulties in documenting and publishing changes to their internal system externally.

Criterion 2.4 and 2.7 hold nearly equal percentages of imposed requirements between first-time accreditations and reaccreditations. 2.4. examines the studiability of a programme, including the formation of the curriculum, the student's workload and the support and study counselling available for the students. 2.4 investigates the programmes' personal, financial and material resources. Both criteria are subject to frequent changes that are carried out during an accreditation period, which means that they need to be evaluated with the same precision during each accreditation procedure.

In sum, this analysis of the distribution of requirements across criteria demonstrates that most the most requirements are still related to the formal criteria 2.1, 2.2. and 2.3, while all three register a decrease of requirements between accreditation and reaccreditation. Conversely, criterion 2.5 and 2.9 show an increase, which might be due to newer regulations or a more focused approach of ASIIN during reaccreditation. This study also shows that Criterion 2.4 (Studiability of the Programme) and Criterion 2.7 (Resources) hold nearly equal percentages of imposed requirements in cases of first-time accreditation and reaccreditation. As both criteria are subject to frequent changes carried out in-between on-site visits of ASIIN's experts, they need to be evaluated with the same precision during each accreditation procedure.

DISTRIBUTION OF REQUIREMENTS: ASIIN-LABEL

ASIIN-Label: Distribution of Requirements across Criteria

Criterion	Share of Accr.	Share of Reacc.
Criterion 1.1	20,9%	11,4%
Criterion 1.2	1,1%	0,3%
Criterion 1.3	10,1%	8,9%
Criterion 1.4	0,6%	0,0%
Criterion 2.1	3,2%	1,0%
Criterion 2.2	3,1%	5,6%
Criterion 2.3	0,3%	0,0%
Criterion 2.4	0,0%	0,0%
Criterion 3	15,1%	10,6%
Criterion 4.1	1,1%	0,0%
Criterion 4.2	0,0%	14,1%
Criterion 4.3	7,7%	13,2%
Criterion 5.1	13,6%	14,9%
Criterion 5.2	17,2%	
Criterion 5.3	2,9%	5,1%
Criterion 6	5,7%	12,1%

■ Share of Accr.   ■ Share of Reacc.

1.1-Objectives and Learning Outcomes of a Degree Programme; 1.2-Title of the Degree Programme; 1.3-Curriculum; 1.4-Admission Requirements; 2.1-Structure and Modules; 2.2-Workload and Credits; 2.3-Teaching Methodology; 2.4-Support and Assistance; 3-Exams; 4.1-Staff; 4.2-Staff Development; 4.3-Funds and Equipment; 5.1-Module Descriptions; 5.2-Diploma and Diploma Supplement; 5.3-Relevant Rules; 6-Quality Management

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The graphic on the previous page shows the distribution of the imposed requirements across the sixteen criteria that ASIIN together with its stakeholders has set for awarding the ASIIN-label.

In total, most requirements have been issued for criterion 1.1. (Objectives and Learning Outcomes of a Degree Programme), criterion 3 (Exams) and criterion 5.2 (Diploma and Diploma Supplements), albeit criterion 1.1. and 3 also showcase the largest drop between the percentage of requirements issued during first-time accreditation and reaccreditation. Criterion 1.1. deals with the objectives and learning outcomes of degree programmes and as such reflects upon the intended qualification profile of the graduates. A decrease in requirements here shows an impact on the formal structure of the accredited study programmes. Criterion 3 (System, Concept and Organization of Exams) also showcases a significant decrease in imposed requirements, which implies that ASIIN is both thorough in its reaccreditation procedure and successful in enhancing the exam structure of the accredited study programmes.

For cases of reaccreditation, criterion 4.3 (Funds and Equipment), 5.1 (Module Descriptions) and 5.2 (Diploma Supplement) show the highest amount of requirements. While 5.1 and 5.2 show similar percentages in accreditation and reaccreditation, probably due to the changing nature of the module descriptions and diploma supplements over the course of the accreditation period, the requirements imposed on criterion 4.3 have nearly doubled. Similarly, the number of issued requirements for criterion 6 (Quality Assessment and Development) has also more than doubled in procedures of reaccreditation. This increase correlates with the decrease of requirements in criterion 1.1. (Objectives and learning outcomes of a degree programme). While during first-time accreditation, ASIIN evaluated the intended qualification profile of the study programmes, during reaccreditation, ASIIN focused on how the HEIs managed to assess and develop the quality of their study programmes independently. This shift from external to internal quality management shows the impact ASIIN has on enhancing the quality of these accredited study programmes. Furthermore, criterion 5.1 (Module descriptions) and 5.2 (Diploma and Diploma Supplement) hold nearly equal percentages of imposed requirements between first-time accreditation and reaccreditation. Both criteria are subject to frequent changes that are carried out during an accreditation period, which implies that they must be evaluated with the same precision during each accreditation procedure.

Finally, a number of criteria have been issued with only a few or no requirements: 1.2 (Title of the Degree Programme), 1.4 (Admission Requirements), 2.3 (Teaching Methodology), 2.4 (Support and Assistance), 4.1 (Staff), 4.2 (Development of Staff). While 1.2, 1.4, 2.3 and 4.1 showcases comparatively few requirements during first-time accreditation, all of these requirements were fulfilled during reaccreditation, which indicates the impact ASIIN has in increasing the quality of study programmes. Yet, criterion 2.4 and 4.2 have not been imposed with any criteria in the studied period of 2017, which implies either that all study programmes have fulfilled these criteria, or that these criteria have not been examined properly enough by the peers. Further impact studies will show, which of these two conclusions apply..

In sum, most requirements are related to criteria 1.1 (Objectives and Learning Outcomes), 4.3 (Funds and Equipment) and 5.1 (Module Descriptions), although a shift away from external

quality management towards internal quality management of the HEIs is visible as well and proves the impact ASIIN has on furthering the quality of HEIs through its accreditation procedure. Furthermore, ASIIN will further examine those criteria that showcase close to no requirement to see if the agency must improve its process of evaluation and assessment.

CONCLUSION AND FUTURE OUTLOOK

This study has been designed to evaluate the overall impact that ASIIN's accreditation procedures have on higher educational institutions as well as whether ASIIN fulfils its self-imposed objectives of securing and advancing the quality of academic education. The following results can be discerned from this study:

1. Over 90% of accreditation procedures result in an accreditation with requirements. This can be interpreted as ASIIN's investment in developing the quality of study programmes both nationally and internationally.
2. Nearly half of all first-time accreditation procedures have been undertaken at international HEIs, which is indicative of ASIIN role as an international accreditor.
3. For the AC-label, most requirements are attributed to the category of "formal criteria" – Qualification Goals, Conceptual Classification, and Concept of the Study Programme – which demonstrates that German HEIs still struggle with operationalizing and implementing these criteria. Yet, a drop of the issued requirements between first-time accreditation and reaccreditation exemplifies that accreditation enhances the quality of study programmes long-term.
4. For the AC-label, many requirements are issued for criterion 2.8 – Transparency and Documentation. This is due to the fact that many HEIs wait with publishing the final version of their regulations and relevant rules until after the audit took place, in order to make sure that their finalized version is in line with the criteria of the AC. As such, criterion 2.8 is criticized mainly because the HEIs have not yet finalized the drafts of their rules and regulations.
5. For the AC-label, there exists an increase in requirements for criterion 2.5 – System of Examination. This is due to an internal development of the German accreditation system as over the course of the last years, the German Accreditation Council has considered the examination burden a more serious criterion. Also, in 2010, the KMK has set new regulations for the system of examination and these changes consequently affected study programmes in their reaccreditation in 2017.
6. For the AC-label, no requirements are issued for criterion 2.11 – Gender Equality and Equal Opportunities. This relates to the fact that by now HEIs hold sophisticated strategies of diversity.
7. For the ASIIN-label, an increase in requirements between first-time accreditations and re-accreditations can be seen for criterion 4.3 – Funds and Equipment. Generally, ASIIN mostly accredits international HEIs of up-and-coming nations, whose equipment does not always match the standard of German HEIs. During first-time accreditations, this criterion was oftentimes a recommendation instead of a requirement. During

reaccreditations, it became visible, however, that the HEIs did not follow through with the recommendations so that criterion 4.3 was now issued as a requirement.

8. For the ASIIN-label, an increase in requirements between first-time accreditations and reaccreditations is visible for criterion 6 – Quality Management. Here, reaccreditations have shown that the international HEIs' culture of quality management does not always match that of German HEIs, which is why ASIIN has issued more requirements to advance this criterion.

FUTURE OUTLOOK

This impact study aims at displaying ASIIN's practice to external stakeholders as well as enhancing the internal quality of the agency. As such, this study is being discussed in ASIIN's committees, especially with regards to the distribution of the accreditation procedures across the Technical Committees, ASIIN's reach nationally and internationally and the analysis of distributed requirements.

On the basis of the analysed year 2017 and with the addition of data from other years, ASIIN plans to conduct and publish further thematic studies. Hereby, ASIIN plans to focus specifically on the thematic impact of its accreditation practices. Future topics of analysis have been envisioned as follows: First, an analysis of the recommendations. Second, a comparison of the study programs that were up for reaccreditation in 2017 with the results of their first accreditation to draw conclusions for ASIINs long-term impact on the development and quality of study programs. Finally, the current impact study of 2017 shall be expanded to include accreditation procedures of the last ten years (2007-2017). This will allow to detect eventual trends in accreditation as a whole and for ASIIN as an agency specifically.