

EXTERNAL REVIEW REPORT

**ON THE COMPLIANCE WITH
EUROPEAN STANDARDS AND GUIDELINES PARTS 2 AND 3**

By

**MÜDEK
(Association for Evaluation and Accreditation of
Engineering Programs),
Istanbul, Turkey**

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Date of Report:
August 2nd 2013

EXECUTIVE SUMMARY

During the period 9 – 15 March 2013, an ENAEE Review Team conducted a review of MÜDEK and its accreditation processes and the Chair of the Review Team attended the MÜDEK Accreditation Board Meeting on 29 June 2013.

The purpose of the review was to make a recommendation to the European Quality Assurance Register for Higher Education (EQAR) on the level of compliance of MÜDEK with European Standards and Guidelines (ESG) Parts 2 and 3 with the purpose of MÜDEK applying to EQAR.

MÜDEK was established in 2002 and became a legal entity in the form of an association in 2007. In 2007, MÜDEK was also officially recognised by the Higher Education Council of Turkey as the national agency for the accreditation of engineering programmes in Turkey.

MÜDEK has published its accreditation policies, procedures and criteria as well as detailed guidelines for institutions proposing to submit programmes for accreditation. In addition criteria are in place for the selection and training of accreditation team members. All the relevant documents are available on the website.

The review activities of the ENAEE Review Team involved a detailed meeting and discussion with MÜDEK officials and staff on MÜDEK and its policies and processes, an observation of a MÜDEK accreditation team during their visit to Koc University in Istanbul and the attendance by the ENAEE Review Team Chair at the subsequent MÜDEK Accreditation Board Meeting.

The Report evaluates the compliance of the MÜDEK Evaluation and Accreditation Procedures with each section of the European Standards and Guidelines (ESG) Part 2 and Part 3.

The Review Team would judge that MÜDEK is **fully compliant** with all the ESG Standards 2.1 to 2.8 and 3.1 to 3.8.

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1. INTRODUCTION

1.1. GENERAL DETAILS OF THE VISIT

This report reviews the compliance of MÜDEK to the European Standards and Guidelines (ESG) Parts 2 and Part 3 with the purpose of MÜDEK applying to European Quality Assurance Register for Higher Education (EQAR).

This report is based on the information given in the MÜDEK application for an external review to assess the level of compliance of MÜDEK with European Standards and Guidelines (ESG) Parts 2 and 3 with the purpose of reporting to EQAR, and on the observations made during a review visit to Koc University in Istanbul, a visit to the MÜDEK offices to meet MÜDEK officials and attendance, by the Chair, at a MÜDEK Engineering Programme Accreditation Board (MAK) Meeting in Istanbul.

This review was undertaken in conjunction with the standard EUR-ACE process for the assessment of the level of compliance of MÜDEK with ENAEE Standards and Guidelines for Accreditation Agencies with the purpose of renewal of authorisation for delivering the EUR-ACE Label. To comply with the EQAR Review requirements, the standard 3-member EUR-ACE review Team was increased to include a student as the fourth member of the Review team.

The following MÜDEK documents were made available to the Review team:

- Application Form for the re-authorisation to award the EUR-ACE Label
- Self-Assessment Report on compliance with ESG Parts 2 & 3
- MÜDEK Charter, September 2009
- MÜDEK Operational Regulations, March 2011
- Policies and Procedures for Evaluation and Accreditation, October 2012
- Criteria for Evaluating First Cycle Programmes, October 2009
- Criteria for Evaluating Second Cycle Programmes, October 2012
- Self-Assessment Report Template, October 2009
- MÜDEK Code of Ethics, march 2011
- Evaluation Manual, October 2009
- Programme Evaluator Report, December 2009
- List of Accredited Engineering Programmes, December 2012
- Guidelines for Pilot Application of using Student Members in MÜDEK Evaluations, February 2013
- Sample copy of Typical Evaluation Report
- MÜDEK Quality Policy, November 2009
- Evaluation of Evaluation Team Members, December 2009
- Nominating Committee Directive, December 2009

Schedule of Visits and Meetings:

1. Briefing Meeting of ENAEE Review Team, 10th March 2013 in the Fuat Pasa Yalisi Hotel, Istanbul.
2. Briefing Meeting of ENAEE Review Team and MÜDEK Representatives (Erbil Payzin – Chair, Executive Board; Engin Arikan – Koc University Evaluation Team Chair and Executive Board member; Yavuz Ercil – Secretary General), 10th March 2013 in the Hotel.

3. Accreditation Visit of 3 days in duration to Engineering Faculty, Koc University, Istanbul, 11th, 12th and 13th 2013 for the accreditation of First Cycle 4 Year Programmes in Electrical and Electronics Engineering and Industrial Engineering.

MÜDEK Review Team:

Team Chair: Eng. Engin Arikan

Electrical and Electronics Engineering Programme Evaluators: Eng. Elif Baktir; Prof. Dr. Murat Askar

Industrial Engineering Programme Evaluators: Prof. Dr. Ali Riza Kaylan; Prof. Dr. Osman Kulak

Ms. Betül Uralcan – Student Member.

Note: MÜDEK is currently undertaking a pilot study of the participation of a student evaluator in the MÜDEK evaluation process and the visit observed was only the second occasion in which a student member participated in an evaluation visit.

The EUR-ACE Review Team received English translations of the Koc University Self-Assessment reports, for both the Electrical and Electronics Engineering and the Industrial Engineering Programmes and the Institutional Profile. During the visit some of the presentations were made in English and for presentations, meetings and discussions that were conducted in Turkish, interpreters, from either MÜDEK or Koc University, were available to assist the EUR-ACE Team.

Senior Staff from Koc University consulted during the visit:

Rector: Umran Inan

Vice-Rector, Research: Irsadi Aksun

Vice-Rector, Academic Affairs: Selcuk Karabati

Acting Dean & Head of Industrial Eng. Dept.: Fikri Karaesmen

Head Electrical and Electronics Eng. Dept.: Hakan Urey

4. On Thursday March 14th: the EUR-ACE Review Team met with MÜDEK officials and staff for a detailed discussion on MÜDEK, its policies, its accreditation process and other relevant related issues.

MÜDEK Personnel present:

Erbil Payzin, Chair, Executive Board

Timur Dogu, Chair, Engineering Programs Accreditation Board (MAK)

Orhan Alankus, Vice Chair, Engineering Programs Accreditation Board (MAK)

Aysegul Tanik, Member, Engineering Programs Accreditation Board (MAK)

Engin Arikan, Member, Executive Board

Yavuz Ercil, Secretary General

5. The Chair of the EUR-ACE Review team attended a plenary meeting of the MÜDEK Engineering Programmes Accreditation Board (MAK) in Istanbul on 29 June 2013. MAK reviews the evaluation teams recommendations and is the final authority in the accreditation decision making process.

The EUR-ACE Review Team would like to thank MÜDEK for its hospitality and all the support provided. The visit was well planned and the ENAEE Review Team was warmly welcomed both by the MÜDEK personnel and by the members of the MÜDEK accreditation team. Special thanks go to Professor Erbil Payzin and Yavuz Ercil, who before and during the visits made sure that all the needs of the EUR-ACE Review Team were taken care of.

1.2 HISTORY AND DEVELOPMENT OF THE AGENCY / AGENCY INFORMATION – Summary

MÜDEK is the national accreditation agency for accreditation of engineering education programmes in Turkey.

MÜDEK was formed in 2002 by the Engineering Deans Council in Turkey as an independent non-governmental body with the name Engineering Evaluation Board to perform outcomes-based evaluations of engineering programmes.

On 25 January 2007, MÜDEK became a legal entity in the form of an association while retaining its original name. On 16 November 2007 MÜDEK was officially recognised by the Higher Education Council of Turkey as the national agency for the accreditation of engineering programmes in Turkey.

MÜDEK was authorized by ENAEE on 21 January 2009 for a period of 5 years to award the EUR-ACE (First Cycle) Label to the first cycle (4-year Bachelor's) engineering programmes that it accredits.

MÜDEK became a full signatory of the Washington Accord in 2011.

Currently, MÜDEK accredits only 4-year First Cycle (Bachelor's) engineering programmes. However, following two years of intensive preparation, MÜDEK is planning to extend its accreditations to Second Cycle (Master's) engineering programmes, and is hoping to have a pilot accreditation of a Second Cycle (Master's) engineering programme in 2013.

2. Compliance of MÜDEK Evaluation and Accreditation Procedures with ESG Part 2

2.1. Use of internal quality assurance procedures

ESG 2.1: Use of internal quality assurance procedures

Standard:

External quality assurance procedures should take into account the effectiveness of the internal quality assurance processes described in Part 1 of the European Standards and Guidelines.

Guidelines:

The standards for internal quality assurance appearing in Part 1 provide a valuable basis for the external quality assessment process. It is important that the institutions bear internal policies and procedures that are carefully evaluated in the course of external procedures to determine the extent to which the standards are being met.

If higher education institutions are to be able to demonstrate the effectiveness of their own internal quality assurance processes, and if those processes properly assure quality and standards, then external processes might be less intensive than otherwise.

Findings

Details of the criteria used by MÜDEK in evaluating engineering study programmes and the evaluation process are given in the relevant MÜDEK documents.

Analysis

During the ENAEE's Review Team's observation of the evaluation of the programmes at Koc University, qualitative and quantitative analysis of the following

aspects of the programmes and of the higher education institution (HEI) were checked:

- Mission statements of the HEI, of the faculty, and of the department running the programme.
- Programme educational objectives and the extent to which these objectives are consistent with the missions of the institution, faculty and department and the periodic review of these educational objectives.
- Programme and learning outcomes defined for the programme, the processes used to enable the achievement of these outcomes by the students and the process and techniques used to determine whether these outcomes are actually achieved.
- The existence of a system which measures the extent to which the educational objectives and programme outcomes are achieved and whether these assessment results are actually used for the continuous improvement of the programme.
- The existence of an integral system addressing the evaluation criteria requirements regarding students, curriculum, faculty members, infrastructure, institutional support and financial resources.

Overall the ENAEE Review Team was impressed by the thoroughness of the evaluation.

Conclusion

The Review Team therefore considered that MÜDEK is **fully compliant** with ESG 2.1.

2.2. Development of external quality assurance procedures

<p>ESG 2.2 Development of external quality assurance processes</p> <p>Standard: The aims and objectives of quality assurance processes should be determined before the processes themselves are developed, by all those responsible (including higher education institutions) and should be published with a description of the procedures to be used.</p> <p>Guidelines: In order to ensure clarity of purpose and transparency of procedures, external quality assurance methods should be designed and developed through a process involving key stakeholders, including higher education institutions. The procedures that are finally agreed should be published and should contain explicit statements of the aims and objectives of the processes as well as a description of the procedures to be used. As external quality assurance makes demands on the institutions involved, a preliminary impact assessment should be undertaken to ensure that the procedures to be adopted are appropriate and do not interfere more than necessary with the normal work of higher education institutions.</p>

Findings

All documents relating to the MÜDEK evaluation criteria and the evaluation process used during programme evaluations are available on the MÜDEK website. When these documents are being reviewed or revised, the draft documents are published on the MÜDEK website and comments from all constituents and stakeholders, including staff from HEIs that have been accredited and evaluation team members are solicited. The final versions of these documents are then prepared and put into force following their approval by the MÜDEK Executive Board.

MÜDEK also has a process for monitoring the performance and objectivity of the evaluation team members, including their behaviour in their relationship with the officials of the institution hosting the programmes that have been evaluated and with other team members and providing feedback on these matters. The results of the evaluation of the team members are used for giving feedback to programme evaluators and for improving the evaluation process.

At the end of the evaluation process, the evaluation team members are expected to make recommendations to MÜDEK for improvement of the evaluation process.

Analysis

Based on a review of the relevant documentation, discussions with MÜDEK officials and on observing the evaluation team implementing the procedures, the ENAEE Review Team considered that the Procedures and the General Regulations and Guidelines are satisfactory.

Conclusion

The Review Team concluded that MÜDEK was **fully compliant** with ESG 2.2.

2.3. Criteria for decisions

ESG 2.3	Criteria for decisions
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Standard:

Any formal decisions made as a result of an external quality assurance activity should be based on explicit published criteria that are applied consistently.

Guidelines:

Formal decisions made by quality assurance agencies have a significant impact on the institutions and programmes that are judged. In the interests of equity and reliability, decisions should be based on published criteria and interpreted in a consistent manner. Conclusions should be based on recorded evidence and agencies should have in place ways of moderating conclusions, if necessary.

Findings

The MÜDEK Academic Criteria consist of General Criteria and Program Specific Criteria and each of these is examined in detail by the evaluation team. Following the visit, the MÜDEK evaluation team prepares an evaluation report and submits it with a recommendation to the Engineering Programs Accreditation Board (MAK), which is the final authority in any accreditation decision. In order to ensure consistency in accreditation decisions, the evaluation reports undergo a consistency check process prior to being discussed by MAK.

If it is concluded that a program meets all the minimum requirements defined in MÜDEK's criteria, and therefore has no reported deficiencies or weaknesses then the program is accredited for a maximum of 5 years. If a programme has no reported deficiencies but has one or more reported weaknesses then it is accredited for 2 years. If an accredited programme is evaluated to have one or more deficiencies on one or more criteria during its periodic general review, then a "show-cause" interim review focussed on the relevant criteria is required within one year following the date of such an evaluation. If as a result of this focussed "show-cause" interim review, these deficiencies are found to persist, the programme's accreditation will not be extended. The HEI may appeal this decision.

MÜDEK sends the final evaluation report to each relevant HEI, together with the accreditation decision statement regarding their programmes that have been evaluated.

A programme which has been granted a limited duration (1 or 2 years) accreditation will be subject to an interim evaluation at the end of this period and if no deficiency or weakness is found during this interim evaluation, the accreditation period is extended until the next general review date. A programme which has been granted full accreditation will be subject to a general evaluation at the end of its accreditation period.

MÜDEK issues, archives and publicly announces the list of accredited programmes annually

Analysis

The ENAEE Review Team were very impressed with the very conscientious way in which the evaluation team approached their decision making and with the thoroughness of the overall MÜDEK decision making process.

Conclusion

The Review Team considered that MÜDEK is **fully compliant** with ESG 2.3.

2.4. Process fit for purpose

ESG 2.4 Processes fit for purpose

Standard:

All external quality assurance processes should be designed specifically to ensure their fitness to achieve the aims and objectives set for them.

Guidelines:

Quality assurance agencies within the EHEA undertake different external processes for different purposes and in different ways. It is of utmost importance that agencies should operate procedures which fit for their defined and published purposes. Experience has shown, however, that there are some widely-used elements of external review processes which not only help to ensure their validity, reliability and usefulness, but also provide a basis for the European dimension to quality assurance.

Amongst these elements, the following are particularly noteworthy:

- insistence that the experts undertaking the external quality assurance activity have appropriate skills and are competent to perform their task;
- the exercise of care in the selection of experts;
- the provision of appropriate briefing or training for experts;
- the use of international experts;
- participation of students;
- ensuring that the review procedures used are sufficient to provide adequate evidence to support the findings and conclusions reached;
- the use of the self-evaluation/site visit/draft report/published report/follow-up model of review;
- recognition of the importance of institutional improvement and enhancement policies as a fundamental element in the assurance of quality.

Findings

The development and implementation of the external evaluation process used by MÜDEK for accrediting engineering programmes are in line with the best practices outlined in the guidelines of ESG 2.4.

Programme evaluators are selected by MÜDEK from among academic and practicing engineering professionals who are experts in their fields and who are dedicated to advancing engineering education. Each programme evaluator must complete a programme evaluator training course organised by MÜDEK before participating in a MÜDEK programme evaluation. In their first programme evaluation assignment, new programme evaluators are normally assigned as co-evaluators with an experienced evaluator.

Between years 2003-2012, MÜDEK held 17 Evaluator Training Workshops. These training workshops have been attended not only by new programme evaluator candidates, but also by recently elected members of the MÜDEK Engineering Programmes Accreditation Board (MAK). As of May 2013, MÜDEK has a pool of 199 trained programme evaluators of whom 62 are practicing engineering professionals from 17 different engineering disciplines and all are available for programme accreditations.

Accreditation evaluations are conducted by programme evaluation teams, which are formed by MAK. The minimum team size applicable when evaluating a single programme is one team chair plus two programme evaluators. In case of evaluating two or more programmes of the same HEI, the evaluation team would consist of one team chair and at least one programme evaluator per programme. A co-chair, additional co-evaluators and observers may also be included in the evaluation team, as necessary.

In general, because the MÜDEK evaluations are conducted in Turkish, international experts are not used as evaluators. However, international experts participate as observers in MÜDEK programme evaluations during the periodic review of MÜDEK for the purpose of granting the authority to award the EUR-ACE Label and for Washington Accord signatory status.

Prior to 2013, student evaluators were not included in the MÜDEK evaluation teams, and the participation of students in the evaluation process occurred during the institutional visits, where the programme evaluators always held meetings with students enrolled on the programmes under evaluation. During the 2012-2013 evaluation cycle, MÜDEK has started a pilot scheme to include student members in evaluation teams.

Details of the procedures used by the evaluation team during the evaluation process are given in the MÜDEK evaluation manual. The programme evaluators record all their findings in their Program Evaluator Report and these findings are used as the basis for the evaluation report that will subsequently be prepared.

The principles to be followed when implementing the MÜDEK evaluation and accreditation process are defined in Directive on Policies and Procedures for Evaluation and Accreditation (PPEA Directive) and the key components are:

- Self-assessment reports which are prepared by HEIs using a template provided by MÜDEK.

- Site Visits, lasting 3 days, to the HEI running the programme.

The programme evaluation visit observed by ENAEE Review Team started on Monday March 11th with the MÜDEK evaluation team meeting and ended on the following Wednesday with the final team meeting at the University. The Evaluation team examined the documentation prepared by the HEI and during the visit reviewed the programme documentation (exams; projects; minutes of the department meetings, strategic plans and reports), visited facilities and held interviews with the teaching staff, students and graduates, during which the focus of the evaluation team was concentrated on the evidence regarding the achievement of the programme outcomes, the strengths and weaknesses of the programmes being evaluated and on HEI's plans for improvements in the future. The meetings were conducted very efficiently and the overall communication was very satisfactory.

- Presentation of the findings of the visit

On the last day of the institutional visit, an exit interview meeting is held at which the evaluation team orally present their factual findings to the Senior Officers and Faculty at the HEI and subsequently the evaluation team provide the HEI with a written list of the shortcomings that had been orally presented for each programme being evaluated.

- Preparation of the draft and final evaluation reports

Within 30 days following the exit interview meeting, the HEI has the possibility to respond to the initial findings and the written list of shortcomings. These comments are then transmitted to the evaluation team members, who prepare their draft programme evaluation reports, incorporating any responses that the HEI might have sent. The team chair consolidates the individual programme evaluation reports and sends this draft report to the MAK Chairman. Draft reports prepared by different evaluation teams during the same evaluation period are checked for consistency by a special consistency committee, before being considered by MAK.

- Accreditation decisions;

MAK is the final authority in any accreditation decision and this decision is based on the evaluation team's recommendations.

For programmes being evaluated for the first time, these accreditation decisions may vary from full accreditation for a maximum of 5 years if a programme has no reported deficiencies or weaknesses, to 2 years if a programme has no reported deficiencies but has one or more reported weaknesses, or to not to accredit if a programme has one or more deficiencies

- Communication of the accreditation decisions to the relevant HEI's:

MÜDEK sends the final evaluation report to each relevant HEI, together with the accreditation decision statement regarding their programmes that have been evaluated.

- Publication of accreditation decisions;

MÜDEK issues, archives and publicly announces the list of accredited programmes annually.

- Procedures for appealing accreditation decisions:

In the case of “not to accredit” decisions, the HEI’s concerned can appeal to MÜDEK and request re-evaluations and re-visits. Details of the appeals procedure are given in the PPEA Directive.

In recognition of the importance of institutional improvement and enhancement policies during MÜDEK programme evaluations, two of the MÜDEK evaluation criteria, criterion no. 4 (Continuous Improvement) and criterion no. 9 (Organization and Decision-Making Process) directly address the continuous quality improvement processes implemented by the HEI.

Analysis

During the site visit to Koc University, the ENAEE Review Team observed all the activities of the evaluation team and was very impressed by their knowledge, experience and dedication. The evaluation team worked very hard and did an excellent job in undertaking the task at hand and checking the evidence to support their findings and conclusions. The ENAEE Review Team would consider that the factual findings presented to the Vice-Rector, Dean and Heads of Departments at Koc University on the last day of the visit were fair and very thorough.

The ENAEE Review Team observed the participation of the evaluation team student member during the visit to Koc University and considered that it was a very useful addition to the process, because the student member met the students on the programme separately and this enabled evaluation team get a better peer view of the students’ opinion of their programme

The Chair of the ENAEE Review Team observed the subsequent MÜDEK Accreditation Board Meeting and would consider that all the programmes and reports considered were dealt with in a very fair and thorough manner.

Conclusion

The ENAEE Review Team was very impressed with the thoroughness of the MÜDEK process and procedures and would consider that MÜDEK is **fully compliant** with ESG 2.4.

2.5. Reporting

ESG 2.5 Reporting

Standard:

Reports should be published and should be written in a style which is clear and readily accessible to its intended readership. Any decisions, commendations or recommendations contained in reports should be easy for a reader to find.

Guidelines:

In order to ensure maximum benefit from external quality assurance processes, it is important that reports should meet the identified needs of the intended readership. Reports are sometimes intended for different readership groups and this will require careful attention to structure, content, style and tone.

In general, reports should be structured to cover description, analysis (including relevant evidence), conclusions, commendations, and recommendations. There should be sufficient preliminary explanation to enable a lay reader to understand the purposes of the review, its form, and the criteria used in making decisions. Key findings, conclusions and recommendations should be easily locatable by readers.

Reports should be published in a readily accessible form and there should be opportunities for readers and users of the reports (both within the relevant institution and outside it) to comment on their usefulness.

Findings

At the end of the accreditation process, MÜDEK prepares a comprehensive evaluation report, as an attachment to the accreditation decision statement which is sent to the HEI whose programmes have been evaluated. This final report is based on the draft report prepared by the evaluation team and will address the strengths of the programme as well as the shortcomings (deficiencies, weaknesses, and concerns as applicable) of each programme that has been evaluated. The main aim is to provide sufficient information to the HEI on the areas of the programme that need improvement.

Analysis

The ENAEE Review Team was able to view a sample of final reports during their visit and they also received copies of the reports on the visits to Koc University, which were presented at the MÜDEK Accreditation Board. The Review Team was impressed with the thoroughness and level of detail included in the various reports.

Conclusion

The ENAEE Review Team is satisfied that MÜDEK is **fully compliant** with ESG 2.5.

2.6 Follow-up procedures

ESG 2.6 Follow-up procedures

Standard:

Quality assurance processes which contain recommendations for action or which require a subsequent action plan, should have a predetermined follow-up procedure which is implemented consistently.

Guidelines:

Quality assurance is not principally about individual external scrutiny events: It should be about continuously trying to do a better job. External quality assurance does not end with the publication of the report and should include a structured follow-up procedure to ensure that recommendations are dealt with appropriately and any required action plans drawn up and implemented. This may involve further meetings with institutional or programme representatives. The objective is to ensure that areas identified for improvement are dealt with speedily and that further enhancement is encouraged.

Findings

MÜDEK has a comprehensive follow-up procedure for programmes that do not fully meet the MÜDEK evaluation criteria.

A programme which has been granted accreditation for a limited duration (2 years) will be subject to an interim evaluation at the end of this period. For such programmes, the HEI submits an interim self-assessment report that is focused only on the weaknesses, concerns, and observations of the previous general review. The interim evaluation may be made based solely on the interim report or may also involve a site visit, depending on the nature of the previous accreditation decision. If no deficiencies or weaknesses are found during the interim evaluation, the period of accreditation shall be extended by a maximum of 3 years. However, if the original deficiencies still exist the programme's accreditation shall not be extended.

Analysis

As mentioned in 2.5 above, examples of interim reports were available to the ENAEE Review Team during their visit and these clearly indicated that MÜDEK undertakes satisfactory follow-up procedures.

Conclusion

The ENAEE Review Team considered that MÜDEK is **fully compliant** with ESG 2.6.

2.7 Periodic reviews

<p>ESG 2.7 Periodic reviews</p> <p>Standard: External quality assurance of institutions and/or programmes should be undertaken on a cyclical basis. The length of the cycle and the review procedures to be used should be clearly defined and published in advance.</p> <p>Guidelines: Quality assurance is not a static, but a dynamic process. It should be continuous and not “once in a life-time”. It does not end with the first review or with the completion of the formal follow-up procedure. It has to be periodically renewed. Subsequent external reviews should take into account progress that has been made since the previous event. The process to be used in all external reviews should be clearly defined by the external quality assurance agency and its demands on institutions should not be greater than are necessary for the achievement of its objectives.</p>

Findings

MÜDEK carries out a detailed evaluation for each accredited programme every five years for the renewal of accreditation.

MÜDEK in turn is periodically reviewed by the national authority, Higher Education Council of Turkey (YÖK) for compliance.

In addition MÜDEK is subject to a EUR-ACE external review every 5 years for renewal of authorization to deliver EUR-ACE Labels. ENAEE conducted the external review of MÜDEK for the first time in 2008 and authorized MÜDEK to deliver EUR-ACE First Cycle Labels for a period of 5 years starting from the beginning of 2009. The ENAEE Review Team conducted the external review of MÜDEK in March 2013 with the purpose of considering the extension of this authority to deliver EUR-ACE Labels to 2018.

MÜDEK has also been subjected to an international external review by Washington Accord in 2010 resulting in MÜDEK being accepted as a full signatory to the Washington Accord in 2011. According to current Washington Accord rules, each signatory should be subjected to a periodic external review every 6 years. The next periodic review of MÜDEK by the Washington Accord will be in 2016.

Analysis

The ENAEE Review Team would consider that satisfactory periodic review processes are in place both for MÜDEK's own evaluation of programmes and for the periodic external reviews of MÜDEK itself.

Conclusion

The ENAEE Review Team considered that MÜDEK is **fully compliant** with ESG 2.7.

2.8. System-wide analyses

<p>ESG 2.8 System-wide analyses</p> <p>Standard: Quality assurance agencies should produce from time to time summary reports describing and analysing the general findings of their reviews, evaluations, assessments, etc.</p> <p>Guidelines: All external quality assurance agencies collect a wealth of information about individual programmes and/or institutions and this provides material for structured analyses across whole higher education systems. Such analyses can provide very useful information about developments, trends, emerging good practice and areas of persistent difficulty or weakness and can become useful tools for policy development and quality enhancement. Agencies should consider including a research and development function within their activities, to help them extract maximum benefit from their work.</p>

Findings

MÜDEK annually prepares a report, which includes information on programme evaluation and accreditation activities during the previous year. In addition MÜDEK informs the HEIs and other stakeholders on shortcomings that are observed frequently during evaluation visits.

MÜDEK continuously monitors the current and future needs of the stakeholders of engineering programmes and reviews and updates programme accreditation criteria and procedures as necessary.

MÜDEK First Cycle Evaluation Criteria were revised in 2008 following a comprehensive study, involving all possible stakeholders, in order to

- incorporate accumulated experience gained in the previous five years of programme accreditation,
- encompass the “Turkish Higher-Education Qualifications Framework” for engineering education,
- make them compatible with EUR-ACE Framework Standards,
- make them compatible with Washington Accord Graduate Attributes.

Analysis

The ENAEE Review Team would consider that MÜDEK operates a very satisfactory system analysis and review process.

Conclusion

The ENAEE Review Team considered that MÜDEK is **fully compliant** with ESG 2.8.

3. Compliance of MÜDEK Organizational Structure and Operation Principles with ESG Part 3

3.1. Use of external quality assurance procedures for higher education Standard

ESG 3.1: Use of external quality assurance procedures for higher education Standard:

The external quality assurance of agencies should take into account the presence and effectiveness of the external quality assurance processes described in Part 2 of the European Standards and Guidelines.

Guidelines:

The standards for external quality assurance contained in Part 2 provide a valuable basis for the external quality assessment process. The standards reflect best practices and experiences gained through the development of external quality assurance in Europe since the early 1990s. It is therefore important that these standards are integrated into the processes applied by external quality assurance agencies towards the higher education institutions.

The standards for external quality assurance should together with the standards for external quality assurance agencies constitute the basis for professional and credible external quality assurance of higher education institutions.

Conclusion

As indicated in the above Sections 2.1 to 2.8, the ENAEE Review Team would consider that MÜDEK is **fully compliant** with the standards for external quality assurance contained in ESG Part 2.

3.2 Official Status

ESG 3.2: Official status Standard:

Agencies should be formally recognised by competent public authorities in the European Higher Education Area as agencies with responsibilities for external quality assurance and should have an established legal basis. They should comply with any requirements of the legislative jurisdictions within which they operate.

Findings

As stated in Section 1.2 MÜDEK was formed in 2002 as an independent non-governmental body that performed evaluations of engineering programmes. In January 2007, MÜDEK became a legal entity in the form of an association and later that year was officially recognised by the Higher Education Council of Turkey as the national agency for the accreditation of engineering programmes in Turkey.

MÜDEK was authorized by ENAEE in 2009 to deliver EUR-ACE (First Cycle) Label to first cycle engineering programmes that it accredits and MÜDEK became a full signatory of the Washington Accord in 2011.

Analysis and Conclusion

MÜDEK is formally recognised both nationally and internationally by appropriate authorities as a competent accreditation agency and therefore is **fully compliant** with ESG 3.2.

3.3. Activities

ESG 3.3: Activities**Standard:**

Agencies should undertake external quality assurance activities (at institutional or programme level) on a regular basis.

Guidelines:

These may involve evaluation, review, audit, assessment, accreditation or other similar activities and should be part of the core functions of the agency.

Findings

The primary activity of MÜDEK is to accredit engineering education programmes. Between 2003 and 2012 MÜDEK carried out the evaluation and accreditation of 226 first cycle engineering programmes. Each year MÜDEK has increased the number of programmes evaluated and the evaluation of a total of 80 programmes is in progress in 2012-2013 accreditation cycle. MÜDEK is planning to start accrediting second cycle engineering programmes in late 2013.

Conclusion

The ENAEE Review Team considers that MÜDEK is **fully compliant** with ESG 3.3.

3.4. Resources

ESG 3.4: Resources**Standard:**

Agencies should have adequate and proportional resources, both human and financial, to enable them to organise and run their external quality assurance process(es) in an effective and efficient manner, with appropriate provision for the development of their processes and procedures.

Findings

MÜDEK charges a fee for the programme accreditation services that it provides for the HEI's. These fees constitute the main source of financial resources necessary to support MÜDEK's activities. Other sources of income for MÜDEK are the admission and annual subscription fees it receives from its members, revenues from activities such as training courses, seminars, trainings, publications, etc., and donations. The MÜDEK Regulations on Budget and Financial Affairs require that funds equivalent to 30% of the total budget for each year is transferred forward to the following year as operating capital to guarantee the financial sustainability of its operations.

MÜDEK has an office in Istanbul, staffed by a Secretary General and an Office Manager, both working on a full-time basis.

MÜDEK, as an association, currently (June 2013) has 51 members, two of which are institutional members and the remaining being individual members. MÜDEK Executive Board consists of 5 members, the Auditing Board consists of 3 members and the Engineering Programs Accreditation Board (MAK), which takes the

necessary actions for the evaluation and accreditation of engineering programmes consists of 8 members.

As of the end of May 2013, MÜDEK has a total of 199 trained programme evaluators, of whom 62 are practicing engineering professionals from 17 different engineering disciplines. Programme evaluators serve on a voluntary basis and new programme evaluators are selected and trained every year, as needed.

Conclusion

The ENAEE Review Team would consider that MÜDEK is **fully compliant** with ESG 3.4.

3.5. Mission Statement

ESG 3.5 Mission statement

Standard:

Agencies should have clear and explicit goals and objectives for their work, contained in a publicly available statement.

Guidelines:

These statements should describe the goals and objectives of agencies' quality assurance processes, the division of labour with relevant stakeholders in higher education, especially the higher education institutions, and the cultural and historical context of their work. The statements should make clear that the external quality assurance process is a major activity of the agency and that there exists a systematic approach to achieving its goals and objectives. There should also be documentation to demonstrate how the statements are translated into a clear policy and management plan.

Findings

The MÜDEK Mission Statement is publically available on the MÜDEK website and is as follows -

“To contribute to the enhancement of the quality of engineering education in Turkey by exercising accreditation, evaluation and information-providing efforts for engineering education programmes in different disciplines, thus aiming at graduation of better educated and qualified engineers in order to advance the welfare of the society.”

The activities undertaken by MÜDEK to achieve its goals and objectives are clearly listed in the MÜDEK Charter and the processes associated with accreditation are presented in detail in the MÜDEK Operational Regulations and the PPEA Directive.

Conclusion

The ENAEE Review Team would consider that MÜDEK is **fully compliant** with ESG 3.5.

3.6. Independence

<p>ESG 3.6 Independence</p> <p>Standard: Agencies should be independent to the extent both that they have autonomous responsibility for their operations and that the conclusions and recommendations made in their reports cannot be influenced by third parties such as higher education institutions, ministries or other stakeholders.</p> <p>Guidelines: An agency will need to demonstrate its independence through measures, such as:</p> <ul style="list-style-type: none">• its operational independence from higher education institutions and governments is guaranteed in official documentation (e.g. instruments of governance or legislative acts);• the definition and operation of its procedures and methods, the nomination and appointment of external experts and the determination of the outcomes of its quality assurance processes are undertaken autonomously and independently from governments, higher education institutions, and organs of political influence;• while relevant stakeholders in higher education, particularly students/learners, are consulted in the course of quality assurance processes, the final outcomes of the quality assurance processes remain the responsibility of the agency.

Findings

MÜDEK is an independent, non-governmental association established according to Turkish laws and has no direct relationship with higher education institutions or any government organisation. To guarantee this independence, the MÜDEK Operational Regulations prohibit members of senior management of HEIs and government organisations from serving on the various MÜDEK governing bodies. The Operational Regulations also require MÜDEK to define all of its own processes and accreditation criteria and nominate its evaluators autonomously and independently according to international norms.

Conclusions

The ENAEE Review Team considered that MÜDEK is **fully compliant** with ESG 3.6.

3.7. External quality assurance criteria and processes used by agencies

<p>ESG 3.7 External quality assurance criteria and processes used by the agencies</p> <p>Standard: The processes, criteria and procedures used by agencies should be pre-defined and publicly available. These processes will normally be expected to include:</p> <ul style="list-style-type: none">• a self-assessment or equivalent procedure by the subject of the quality assurance process;• an external assessment by a group of experts, including, as appropriate, (a) student member(s), and site visits as decided by the agency;• publication of a report, including any decisions, recommendations or other formal outcomes;• a follow-up procedure to review actions taken by the subject of the quality assurance process in the light of any recommendations contained in the report. <p>Guidelines: Agencies may develop and use other processes and procedures for particular purposes. Agencies should pay careful attention to their declared principles at all times, and ensure both that their requirements and processes are managed professionally and that their conclusions and decisions are reached in a consistent manner, even though the decisions are formed by groups of different people.</p>
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Findings

The external quality assurance criteria and processes used by MÜDEK are outlined in Section 2 of this Report. The accreditation process and evaluation criteria are outlined in Sections 2.1, 2.2 and 2.3. Section 2.4 covers the external assessment teams, the self-assessment report and further details on the accreditation process. The decision making process and publication of the report are covered in Section 2.5 and the follow-up procedures are reviewed in Section 2.6.

Conclusion

The ENAEE Review Team would judge MÜDEK to be **fully compliant** with ESG 3.7.

3.8. Accountability Procedures

<p>ESG 3.8 Accountability procedures</p> <p>Standard: Agencies should have in place procedures for their own accountability.</p> <p>Guidelines: These procedures are expected to include the following:</p> <ol style="list-style-type: none">1. A published policy for the assurance of the quality of the agency itself, made available on its website;2. Documentation which demonstrates that:<ul style="list-style-type: none">• the agency's processes and results reflect its mission and goals of quality assurance;• the agency has in place, and enforces, a no-conflict-of-interest mechanism in the work of its external experts;• the agency has reliable mechanisms that ensure the quality of any activities and material produced by subcontractors, if some or all of the elements in its quality assurance procedure are subcontracted to other parties;• the agency has in place internal quality assurance procedures which include an internal feedback mechanism (i.e. means to collect feedback from its own staff and council/board); an internal reflection mechanism (i.e. means to react to internal and external recommendations for improvement); and an external feedback mechanism (i.e. means to collect feedback from experts and reviewed institutions for future development) in order to inform and underpin its own development and improvement.3. A mandatory cyclical external review of the agency's activities at least once every five years.

Findings

MÜDEK has a Quality Policy, which has been approved by the MÜDEK Executive Board and is published at the MÜDEK web site.

MÜDEK's policies and processes, which are published in their various documents, are completely in line with MÜDEK's mission and goals of programme accreditation. Confidentiality and the avoidance of conflict-of-interest issues are dealt with in the MÜDEK Code of Ethics. MÜDEK also has a system of evaluating evaluation team members, both by the HEI being reviewed and the other team members, to ensure the on-going quality of its activities. As outlined in Section 2.7 of this report, periodic external reviews of MÜDEK's activities are performed by the Higher Education Council of Turkey, ENAEE (for the renewal of authorisation to deliver EUR-ACE Labels) and the Washington Accord (to continue as a signatory member). Each of

these reviews is conducted independently by the relevant body at 5 or 6 year intervals.

Conclusion

The ENAEE Review Team considered that MÜDEK is **fully compliant** with ESG 3.8.

4 Concluding Comments and Recommendations

The ENAEE Review Team undertook a detailed review of MÜDEK, both to consider its application for the renewal of its authorisation for awarding the EUR-ACE (First Cycle) Label and to provide a coordinated external review of MÜDEK in relation to its application to the European Quality Assurance Register for Higher Education (EQAR).

During the review, the ENAEE Review Team studied the EUR-ACE Application Form and the MÜDEK Self-Assessment Report on compliance with ESG Parts 2 and 3 as well as 15 other documents outlining the various relevant aspects of MÜDEK's Charter, Policy and Regulations. The ENAEE Review Team also visited Turkey and had two meetings with MÜDEK officials during which detailed discussions were held in relation to the two applications and the wide range of other documents associated with MÜDEK's activities. In addition the ENAEE Review Team were able to check on how the various policies and procedures were implemented in practice as they observed two MÜDEK evaluation teams, as they carried out an accreditation review of two engineering programmes at Koc University in Istanbul and subsequently when the ENAEE Review Team Chair attended the MÜDEK Accreditation Board meeting.

Overall the ENAEE Review Team would consider that MÜDEK has an excellent and very thorough set of policy and procedures documents, which are rigorously and conscientiously implemented during the evaluation and decision making process.

The Review Team would judge that MÜDEK is **fully compliant** with all the ESG Standards 2.1 to 2.8 and 3.1 to 3.8.