

WORKSHOP RETREAT FOR THE PREPARATION OF IEA ASSESSMENT REPORT FROM 1^{ST} – 5^{TH} JULY 2024 AT KYAKA HOTEL, MACHAKOS.



1.0 INTRODUCTION

The Engineers Board of Kenya is a statutory body established under Section 3(1) of the Engineers Act 2011. The Board is mandated to regulate standards in the engineering profession and build capacity for individual engineers and engineering firms. The Board also registers engineers and engineering firms and regulates their conduct for improved performance of the engineering profession.

Mentorship towards provisional signatory status at the Washington Accord has been ongoing since February 2021.

The following activities have been completed thus far: -

- i) The Board joined the WFEO as an affiliate member.
- ii) Workshops and trainings
- iii) Drafting of instruments to establish the Engineering Accreditation Council
- iv) Meeting with Council of Engineering Deans & Principals to review engineering accreditation standards
- v) Sending out Expressions of Interest for identification of universities to partner with Board approval of 4No, universities that met the criteria set forth in the EOI as follows:
 - 1) Dedan Kimathi University of Technology
 - a. BSc. Mechanical Engineering
 - b. BSc. Civil Engineering
 - 2) Jomo Kenyatta University of Agriculture and Technology
 - a. BSc. Mechatronics Engineering
 - b. BSc. Mechanical Engineering
 - c. BSc. Agricultural & Biosystems Engineering
 - d. BSc. Civil Engineering
 - e. BSc. Telecommunications & Information Engineering
 - f. BSc. Electrical & Electronics Engineering
 - 3) Moi University
 - a. B. Eng. Chemical and Process Engineering
 - b. B. Eng. Civil and Structural Engineering
 - 4) Strathmore University
 - a. BSc. Electrical and Electronics Engineering

1.1 Overview of the Workshop

Section 7(1)(r) of the Engineers Act 2011 allows the Board to, "collaborate with engineering training institutions, professional associations, engineering organizations and other relevant bodies in matters relating to training and professional development of engineers".

The Board held a workshop with the 4No. Shortlisted universities from 1st to 5th July 2024 at Kyaka Hotel, Machakos County.

The main objective of the retreat was to prepare for the Washington Accord assessment by nominators from the International Engineering Alliance.

The Specific Objectives included: -

- a) Preparations of Self-Assessment Reports (SAR) by all the selected programmes
- b) Alignment of curriculum to Outcome Based Education standards
- c) Review of the Board's Engineering Accreditation Standard

The workshop participants included: -

- 1. Eng. Erastus K. Mwongera, CE Chairman, EBK
- 2. Eng. Margaret N. Ogai, CE Registrar/CEO
- 3. Eng. Grace Onyango, PE- Director, Capacity Building & Accreditation
- 4. Eng. Prof. Peter N. Muchiri Vice Chancellor, DeKUT
- 5. Eng. Joel Sutter, PE Manager, Accreditation
- 6. Dr. Mburu Ngugi Dedan Kimathi University of Technology
- 7. Eng. Dr. Jean Bosco Byiringiro, PE - Dedan Kimathi University of Technology
- 8. Eng. Patrick Kimare, PE Dedan Kimathi University of Technology
- 9. Prof. Mwangi Mbuthia Strathmore University
- 10. Dr. Kennedy Ronoh Strathmore University
- 11. Eng. Prof. Emmanuel Kipkorir, PE Moi University
- 12. Dr. Anthony Thuo Strathmore University
- 13. Eng. Dr. Hiram Ndiritu, PE Jomo Kenyatta University of Agriculture & Technology
- 14. Eng. Dr. Kabini Karanja, PE Jomo Kenyatta University of Agriculture & Technology
- 15. Eng. Nathaniel Matalanga, CE WA Taskforce Member
- 16. Eng. Prof. Bernard Ikua, PE WA Taskforce Member
- 17. Eng. Grace Kagondu, PE WA Taskforce Member
- 18. Eng. Andrew Wahome, CE WA Taskforce Member

2.0 PROGRAMME SUMMARY

2.1 Day 1

2.1.1 Session 1: Opening

The workshop began by opening remarks by the Registrar/CEO, Eng. Margaret N. Ogai, who invited the participants to the workshop and highlighted the following key points; -

- a) The strategic intent of the Board
- b) Objectives of the workshop and the expected outcomes
- c) Boards Programmes

Eng. Prof. Peter Muchiri (Dedan Kimathi University of Technology, Vice Chancellor) highlighted the following: -

- a) Commended the Board on its journey to acceding to the Washington Accord
- b) The importance of producing engineers who can compete globally
- c) Need to prepare skills workshops for capacity building in industries

The Chairman of the Board, Eng. Erastus K. Mwongera highlighted the following points: -

- a) Emphasized the importance of the workshop as a crucial step towards achieving provisional signatory status with the Washington Accord.
- b) Described the Washington Accord as a commitment to quality and equivalence in engineering education.
- c) Stressed the importance of international mobility and recognition of engineering graduates to meet global engineering standards.
- d) Reinforced the Board's commitment to align engineering programs with best practices and standards of leading engineering institutions worldwide.
- e) Stated the Boards achievements and key milestones in acceding to the Washington Accord.
- f) Highlighted the potential and challenge presented by Kenya's youth bulge.

2.1.2 Session 2: Presentations

Overview of Progress on Acceding to the Washington Accord - Eng. Grace Onyango, PE

The presentation covered the following: -

- a) The IEA requirements for the criteria for Admission to Provisional Signatory Status i.e., principles of operational accreditation system with documented procedures and practices
- b) The Board key milestones in acceding to the Washington Accord such as:
 - i. Joining WFEO as an affiliate member
 - ii. Workshops and training of WA taskforce members and the independent review teams.
 - iii. Drafting of instruments to establish the EAC
 - iv. Appointment of assessors
 - v. Development of draft standards
- c) The roadmap to acceding to the Washington Accord
- d) Qualifying requirements and accreditation criteria
- e) The Expression of interest that was to be sent out to all 15. No universities offering engineering programmes recognized by the Board.

See Annex I for Presentation on Overview of Progress on Acceding to Washington Accord

- 2.1.3 IEA Assessment Requirements Ir. Prof. Abdul Aziz Omar, Representative of Mentor, Board of Engineers Malaysia
 - Ir. Prof. Aziz's presentation covered the following:
 - i) Guidelines for critical timelines as follows: -
 - June 2025: IEAM decides on the application.

- May 2025: Feedback from the applicant to WA.
- April 2025: Assessment panel queries.
- February 2025: WA Excom review.
- January 2025: EBK (Engineers Board of Kenya) submits the application with SAR and Panel Report.
- December 2024: Panel report to EBK.
- October 2024: Panel visit (latest).
- August 2024: Programme SAR to Panel (latest).
- Current: EBK sends 'intent to join' to WA (with proposed panel, usually the mentors).
- iii) Institutional roles for all players involved in the preparation and acceding to Washington Accord as follows: -
 - The Board to facilitate Institutions of Higher Learning to adopt Outcome-Based Education (OBE) pedagogy, mentoring, and training and to select pilot programs for evaluation, guides, trains, monitors progress, and sends the application when ready.
 - The Institutions to embrace IEA-WA guidelines, provide financial and moral support, and monitor progress and to ensure the programmes embrace OBE, restructure pedagogy, and involve key staff, students, and support staff in the process.
- iv) The IEA Graduate Attributes and Professional Competencies

See Annex II for Presentation on Readiness for IEA Assessment Requirements

2.1.4 Preparation of Self-Assessment Report (SAR) - Ir. Prof. Abdul Aziz Omar, Representative of Mentor, Board of Engineers Malaysia

The presentation covered: -

- i) The structure of the SAR
- ii) Aligning the Programme Educational Objectives and the Programme Outcomes
- iii) Continual Quality Improvement
- iv) Accreditation Criteria as per the Washington Standard

See Annex III for Presentation on Preparation of Self-Assessment Report (SAR)

2.2 Day 2 - 4: Working Sessions

The Universities identified the programmes for which to prepare the SARs as follows: -

- i) Dedan Kimathi University of Technology BSc. Mechatronics Engineering
- ii) Jomo Kenyatta University of Agriculture and Technology BSc. Mechanical Engineering

- iii) Moi University B. Eng. Chemical and Process Engineering
- iv) Strathmore University BSc. Electrical and Electronics Engineering

Based on the above, the Universities began developing the SARs and the course unit structures.

2.3 Day 5 - Way Forward and Closing

The Universities thanked the Board for organizing the workshop which had given them guidance on the preparation for the upcoming IEA assessment.

In order to meet the timelines for acceding to the Washington Accord, critical actions were identified as follows: -

S/No	Action	Description	Actor	Timelines
1.	Ready SARs, Action plans and aligned curriculums	The universities to finalize and submit to the Board the developed SARs, action plans and aligned curriculums	Universities	12th - 15th July 2024
2.	Development of a detailed roadmap	Development of specific targets and milestones for the roadmap to acceding to the Washington Accord, including Board readiness activities.	EBK	9 th July 2024
3.	Enhanced support mechanisms	Identify areas for further support and mentorship from mentors. Regularly update the support plan based on feedback.	EBK Universities	
4.	Regular reviews and mock assessments	Conduct regular reviews and mock assessments to ensure continuous preparedness for the Washington Accord evaluation.	EBK Assessors WA Taskforce	Bi-monthly, starting August 2024.
5.	Collaboration and virtual engagements	Universities collaborate and participate in virtual forums, especially during career weeks, to foster shared learning and preparedness.	IHLs	
6.	Finalization of EAC Instruments	Complete and submit the Engineering Accreditation Council (EAC) instruments to the Attorney General and brief the Cabinet Secretary.	ЕВК	15 th July 2024

7.	Resource mobilization	Engage in international lobbying and apply for budget allocations to secure necessary resources for the accreditation process.	EBK	
8.	Development and sensitization of AMS	Fast-track the development of the Accreditation Management System (AMS) and conduct sensitization workshops for all stakeholders	EBK BEM	System development by October 2024
9.	Training on accreditation procedures	Provide comprehensive training for assessors and members of the Engineering Accreditation Council to ensure a clear understanding of accreditation standards and procedures.	EBK BEM PEC Assessors IHLs	Start in August
10.	Political and Institutional Support	Prepare a Cabinet memo to secure the highest political support for the accreditation	EBK	
11.	Collaboration with the Commission for University Education (CUE)	Leverage the support from the Commission for University Education to strengthen the bid to accede to the Washington Accord.	EBK CUE	

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9/01/2024

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10.7.2024

Annex I: Photo

