Concept Paper

African Accord and African Engineer' Register for Africa-wide Mobility of African Engineers

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1.0 Introduction

16 April 2021 was a historic day for me as I witnessed the signing of the Africa Asia and Pacific Accord (AAP Accord) Agreement between the Federation of Engineering Institutions of Asia and the Pacific (FEIAP) and the Federation of African Engineering Organisation (FAEO).

This was a giant step towards the harmonisation of engineering education qualifications across the continent of Africa leading to mobility and mobilization of African engineers, technologists and technicians for the sustainable development of Africa through the achievement of African Union Development Agenda 2063.

The accreditation of engineering education qualifications, the certification of post education engineering experience and the mobility of competent engineering human resources across national borders are the purview of national governments. This will be greatly expedited by regional inter-governmental organisations.

In this Concept Paper advocating the African Accord and the African Engineers' Register, I will be comparing the successful experiences of ASEAN where the engineering accreditation and mobility agenda has been sanctioned by the collective political will of ASEAN against the very slow pace of progress of the Non-Government agenda of the Washington Accord..

In 2.0, I revisit the historic FEIAP/FAEO AAP Accord Agreement signing. I am particularly encouraged by the presence and support of the African Union representative, Dr. Eng. Ahmed Hamdy, Executive Director of African Union-STRC (AU Science Technical Research Commission) & AU-ASRIC (AU African Scientific, Research and Innovation Council), as represented by Dr. Mohammed Kyan. The manifest support of African Union for the AAP Accord encourages me to propose the African Accord under the African Union.

3.0 starts with a brief description of the African Union for the benefit of non-African stakeholders. As one who has been engaged with Africa starting with the UN Millennium Project for the UN Millennium Development Goals at the turn of the Century, I am truly amazed at the speed of African integration and African self confidence in being master for her own sustainable development. I applaud the ambitious African Union Agenda 2063 with its 15 flagship projects. Whilst some of the flagship projects involving ethnic, cultural, civilisation, and decolonisation matters will require the long time frame to 2063, other flagship projects can be implemented in shorter time frames. An outstanding example is the World Bank Group/AU Africa Digital Moonshot Project that is aimed to connect the whole of Africa by broadband (3G and above) and

to enable all Africans (10 years old and above) have access to broadband Internet by 2027. The achievements of the Agenda 2063 flagship projects are predicated on the integration of the African Continent by physical and virtual continental wide infrastructure. Thus, it is crucial that skill and competent engineering human resources must be developed urgently in Africa. This is the most cogent argument for the establishment of the Africa Accord under the African Union immediately and target its substantial achievement by 2030 which is the timeline of the UN Sustainable Development Goals (SDGs).

In 4.0, I briefly describe ASEAN and the ASEAN Framework Mutual Recognition Agreement (MRA) and the ASEAN MRA for Engineering Services that provides the ASEAN political patronage for the ASEAN Engineer Register (AER) being administered by the Institution of Engineers Malaysia (IEM) under the ASEAN Federation of Engineering Organisations (AFEO). I was one of the founders of AFEO and being a AFEO past president . I have watched the development of the ASEAN Engineers Register with great interest and pride. I regard it as a good model for Africa and FAEO to follow . I attach the detailed ASEAN Framework Mutual Recognition Agreement (MRA) in Annex as I regard it as a good model for the African Engineers Register.

2.0 FEIAP/FAEO AAP Accord Agreement

The President of the Federation of African Engineering Organisation (FAEO), Ing. (Mrs.) Carlien Bou-Chedid signed a historic Africa, Asia, Pacific (AAP) Accord during a virtual ceremony on 16 April 2021. She explained the Accord's significance, saying: "The AAP Accord means engineering courses under its mandate will be accredited to uniform standards within each category". She observed that with signing the AAP Accord, FAEO has come a step closer to realising the vision of harmonising engineering standards in Africa The AAP Accord is intended to create a framework for an International Standard of Engineering Education, and covers the education of Engineers, Technologists and Technicians. The Accord will, among other things, facilitate the mobility of those graduates holding suitable qualifications under the Accord. She mentioned that the African Continental Free Trade Agreement (AfCTA) defines the direction for free movement of goods and services in Africa; and this Accord addresses the details by facilitating the mobility of engineering practitioners within the continent. The president of the Federation of Engineering Institutions of Asia and the Pacific (FEIAP), Prof. Dr. Huang Wei of the China Association for Science and Technology (CAST), signed the AAP Accord on behalf of FEIAP. Prof. Huang Wei said he considers signing the Accord a great milestone in the history of FAEO and FEIAP as well for engineers around the world in that Africa is joining hands with other member-countries to promote quality engineering education and practice, which will create a larger market for their services. The ceremony was witnessed by the president of the World Federation of Engineering Organisation (WFEO), Prof. Dr. Gong Ke of the China Association for Science and Technology (CAST); WFEO Executive Vice President, Engr. Mustafa B. Shehu of Nigeria; and several other dignitaries from UNESCO and the African Union, and members of Engineering Institutions from Africa and Asia including Prof. Dr. Shahbaz Khan of Pakistan, Director of UNESCO in

Beijing/Representative to China, DPRK, Japan, Mongolia and Republic of Korea/former Director, UNESCO Regional Science Bureau for Asia and the Pacific, Jakarta; Dr. Eng. Ahmed Hamdy, Executive Director of African Union-STRC & AU-ASRIC, represented by Dr. Mohammed Kyan; Dr. Peggy Oti-Boateng of Ghana, Director, Division of Science Policy ad Capacity-Building (SC/PCB) – UNESCO Head Office Paris; and Dr. Thulstrup Hans – Officer in Charge, UNESCO Cluster Office in Asia and the Pacific, Jakarta. FEIAP Secretariat in the Institution of Engineers Malaysia (IEM) was represented by FEIAP Secretary General Ir. Tan Yean Chin, Professor Chuah Hean Teik, FEIAP Past President and Chairman, FEIAP Education Committee that anchors the AAP Accord, IEM President Ir. Ong Ching Loon and Dato Ir. Lee Yee Cheong, WFEO Past President/CEC Honorary Chairman/IEM Past President. Dato Ir. Lee is the Honorary Chairman of the Governing Board, International Science Technology Innovation Centre for South-South Cooperation under the Auspices of UNESCO (ISTIC). ISTIC under Dato Ir. Lee initiated the UNESCO/FEIAP/ISTIC Agreement in 2016 for the standardisation of engineering education qualifications to international standard leading to mobility of engineers in Asia, Pacific and Africa.

3.0 African Union

https://au.int/en/

The African Union (AU) is a continental body consisting of the 55 member states that make up the countries of the African Continent. It was officially launched in 2002 as a successor to the Organisation of African Unity (OAU, 1963-1999).

The main objectives of the AU are to rid the continent of the remaining vestiges of colonisation and apartheid; to promote unity and solidarity amongst African States; to coordinate and intensify cooperation for development; to safeguard the sovereignty and territorial integrity of Member States and to promote international cooperation.

The objectives of AU are namely:

- To promote the unity and solidarity of the African States;
- To coordinate and intensify their cooperation and efforts to achieve a better life for the peoples of Africa;
- To defend their sovereignty, their territorial integrity and independence;
- To eradicate all forms of colonialism from Africa; and
- To promote international cooperation, having due regard to the Charter of the United Nations and the Universal Declaration of Human Rights.

3.1 Agenda 2063: The Africa We Want

https://au.int/agenda2063/overview

AGENDA 2063 is Africa's blueprint and master plan for transforming Africa into the global powerhouse of the future. It is the continent's strategic framework that aims to deliver on its goal

for inclusive and sustainable development and is a concrete manifestation of the pan-African drive for unity, self-determination, freedom, progress and collective prosperity pursued under Pan-Africanism and African Renaissance. The genesis of Agenda 2063 was the realisation by African leaders that there was a need to refocus and reprioritise Africa's agenda from the struggle against apartheid and the attainment of political independence for the continent which had been the focus of The Organisation of African Unity (OAU), the precursor of the African Union; and instead to prioritise inclusive social and economic development, continental and regional integration, democratic governance and peace and security amongst other issues aimed at repositioning Africa to becoming a dominant player in the global arena.

As an affirmation of their commitment to support Africa's new path for attaining inclusive and sustainable economic growth and development African heads of state and government signed the 50th Anniversary Solemn Declaration during the Golden Jubilee celebrations of the formation of the OAU /AU in May 2013. The declaration marked the re-dedication of Africa towards the attainment of the Pan African Vision of ***An integrated, prosperous and peaceful Africa, driven by its own citizens, representing a dynamic force in the international*** **arena** and Agenda 2063 is the concrete manifestation of how the continent intends to achieve this vision within a 50 year period from 2013 to 2063.

The need to envision a long-term 50 year development trajectory for Africa is important as Africa needs to revise and adapt its development agenda due to ongoing structural transformations; increased peace and reduction in the number of conflicts; renewed economic growth and social progress; the need for people centered development, gender equality and youth empowerment; changing global contexts such as increased globalization and the ICT revolution; the increased unity of Africa which makes it a global power to be reckoned with and capable of rallying support around its own common agenda; and emerging development and investment opportunities in areas such as agri-business, infrastructure development, health and education as well as the value addition in African commodities.

Agenda 2063 encapsulates not only Africa's Aspirations for the Future but also identifies key Flagship Programmes which can boost Africa's economic growth and development and lead to the rapid transformation of the continent.

3.2 AU Agenda 2063 Flagship Projects

The flagship projects of Agenda 2063 refer to key programmes and initiatives which have been identified as key to accelerating Africa's economic growth and development as well as promoting her common identity by celebrating her history and her vibrant culture.

The Flagship projects encompass amongst others infrastructure, education, science, technology, arts and culture as well as initiatives to secure peace on the continent.

i. Integrated High Speed Train Network
The project aims to connect all African capitals and commercial centres through an African High Speed Train Network thereby facilitating the movement of goods, factor services and people.

ii. Formulation of an African Commodities Strategy
The development of a continental commodities strategy is seen as key to enabling African countries to add value, extract higher rents from their commodities, integrate into the Global Value chains, and promote vertical and horizontal diversification anchored in value addition and local content development.

iii. Establishment of The African Continental Free Trade Area (AfCFTA)
Accelerate intra-African trade and boost Africa's trading position in the global market place.

iv. The African Passport and Free Movement of People
Remove restrictions on Africans ability to travel, work and live within their own continent.

v. Silencing the Guns by 2020
To achieve the goals of Agenda 2063, Africa needs to work towards ending all wars, civil conflicts, gender-based violence, violent conflicts and preventing genocide.

vi. Implementation of the Grand Inga Dam Project
The development of the Inga Dam is expected to generate 43,200 MW of power, to support current regional power pools and their combined service to transform Africa from traditional to modern sources of energy and ensure access of all Africans to clean and affordable electricity.

vii. Establishment of a Single African Air-Transport Market (SAATM)
The SAATM aims to ensure intra-regional connectivity between the capital cities of Africa and create a single unified air transport market in Africa, as an impetus to the continent's economic integration and growth agenda.

viii. Establishment of an Annual African Economic Forum
The annual African Economic Forum, is a multi-stakeholder meeting that brings together the African political leadership, the private sector, academia and civil society to reflect on how to accelerate Africa's economic transformation harnessing its vast resources to enhance the development of the African people.

ix. Establishment of the African Financial Institutions

The creation of African Continental Financial Institutions aims at accelerating integration and socio-economic development of the continent through the establishment of organisations which will play a pivotal role in the mobilization of resources and management of the African financial sector. The financial institutions envisaged to promote economic integration are the African Investment Bank and Pan African Stock Exchange; the African Monetary Fund and the African Central Bank.

x. The Pan-African E-Network

This aims to put in place policies and strategies that will lead to transformative e-applications and services in Africa; especially the intra-African broad band terrestrial infrastructure; and cyber security, making the information revolution the basis for service delivery in the bio and nanotechnology industries and ultimately transform Africa into an e-Society.

xi. Africa Outer Space Strategy

The Africa outer space strategy aims to strengthen Africa's use of outer space to bolster its development. Outer space is of critical importance to the development of Africa in all fields: agriculture, disaster management, remote sensing, climate forecast, banking and finance, as well as defence and security.

xii. An African Virtual and E-University

This project aims to use ICT based programmes to increase access to tertiary and continuing education in Africa by reaching large numbers of students and professionals in multiple sites simultaneously. It aims to develop relevant and high quality Open, Distance and eLearning (ODeL) resources to offer students guaranteed access to the University from anywhere in the world and anytime (24 hours a day, 7 days a week.

xiii. Cyber Security

The decision to adopt Cyber Security as a flagship programme of Agenda 2063 is a clear indication that Africa needs to not only incorporate in its development plans the rapid changes brought about by emerging technologies, but also to ensure that these technologies are used for the benefit of African individuals, institutions or nation states by ensuring data protection and safety online.

xiv. Great African Museum

The African Charter for African Cultural Renaissance recognises the important role that culture pays in mobilising and unifying people around common ideals and promoting African culture to build the ideals of Pan-Africanism.

xv. Encyclopaedia Africana

The Encyclopaedia Africana aims to provide an authoritative resource on the authentic history of Africa and African life. The Encyclopaedia provides Africans a body of truth to guide and unite them in their development with foundations in all aspect of the African life including history, legal, economic, religion, architecture and education as well as the systems and practices of African societies.

4.0 The Association of South East Asian Nations (ASEAN)

The Association of Southeast Asian Nations, or ASEAN, was established on 8 August 1967 in Bangkok, Thailand, with the signing of the Bangkok Declaration by the Founding Fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei Darussalam then joined on 7 January 1984, Viet Nam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999, making up what is today the **ten Member States of ASEAN**.

AIMS AND PURPOSES

The aims and purposes of ASEAN are:

i. To accelerate the economic growth, social progress and cultural development in the region through joint endeavours in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of Southeast Asian Nations;
ii. To promote regional peace and stability through abiding respect for justice and the rule of law in the relationship among countries of the region and adherence to the principles of the United Nations Charter;
iii. To promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific and administrative fields;
iv. To provide assistance to each other in the form of training and research facilities in the educational, professional, technical and administrative spheres;
v. To collaborate more effectively for the greater utilisation of their agriculture and industries, the expansion of their trade, including the study of the problems of international commodity trade, the improvement of their transportation and communications facilities and the raising of the living standards of their peoples;
vi. To promote Southeast Asian studies; and
vii. To maintain close and beneficial cooperation with existing international and regional organisations with similar aims and purposes, and explore all avenues for even closer cooperation among themselves.

4.1 ASEAN Framework Mutual Recognition Agreements (MRA)

ASEAN Governments signed the framework mutual recognition agreement on services (MRA) on July 18th, 2012 and the ASEAN Mutual Recognition Agreement on Engineering Services on July 6th, 2012. As the two agreements are the intergovernmental agreements sanctioning the ASEAN Engineers Register administered by the ASEAN Federation of Engineering Organisations(AFEO

4.2 ASEAN Federation of Engineering Organisations (AFEO)

The ASEAN Federation of Engineering Organisations (AFEO) is a non-governmental body. Its members are the engineering institutions and organisations of ASEAN countries with the following main objectives:

- To promote goodwill and mutual understanding

- To establish and develop an ASEAN baseline standard for the engineering profession with the objective of facilitating the mobility of the engineers within the ASEAN countries.

All national engineering organisations in the ten member nations of ASEAN are members of AFEO which is affiliated with the ASEAN Secretariat. IEM is the AFEO Secretariat. AFEO was an international member of WFEO.

4.3 The ASEAN Engineers Register (AER)

http://aer.afeo.org/

Background

The idea to set up the ASEAN Engineering Register was first mooted at the 14th AFEO Governing Board meeting held in Melaka, Malaysia on 25 November 1996. The meeting agreed to set up an ASEAN Engineers Working Group to collect, tabulate and disseminate information on the education systems, engineering curriculum, recognition of degrees and qualifications, accreditation of qualifications and requirements for achieving professional engineer status of each ASEAN Institutions. Philippines Technological Council (PTC) was nominated and appointed the permanent Chairmanship to prepare the findings and to standardise the level of engineering competence required for attainment of professional engineer status with relation to the regulation of each of the ASEAN countries.

At the 15th meeting the following year (27 November 1997) in Chiangmai, Thailand, the AFEO Governing Board noted the benchmarking of the APEC Engineer Register and agreed that IEM should host a forum on the ASEAN Engineer and to look into avenue for the AFEO Engineers in Asia Pacific Economic Cooperation (APEC). IEM also undertook to finalise the procedure for the setup of ASEAN Engineering Register.

IEM at the 16th AFEO Governing Board meeting on 23 November 1998 in Angeles City, Philippines, tabled the first working paper on the Guidelines for the setting up of the ASEAN Engineer Register. The paper detailed the objective, concept, minimum requirements and operation of an ASEAN Engineer Register. Procedure of application and registration was also included. In 1999, the AFEO Governing Board agreed to establish the ASEAN Engineer Register and AFEO Board members unanimously agreed that IEM be appointed the Secretariat to maintain the Register.

In 1999, IEM informed the Ministry of Foreign Affairs Malaysia of the formation of the ASEAN Engineer Register and urged Malaysia to initiate consultation in ASEAN to establish the ASEAN Mutual Recognition Agreement (MRA) on engineering services to facilitate the mobility of engineers across ASEAN. Malaysia agreed. That eventually led to the ASEAN MRAs in 2012 as mentioned above. IEM provided the draft for the ASEAN MRA for Engineering Services.

Set Up

The AER Secretariat was set up in September 2002. Since October 2003, a permanent AFEO Secretariat has also been established in IEM.

The AFEO Governing Board at its meeting in Vientiane, Lao PDR in June 2011, have agreed to expand the ASEAN Engineers Register (AER) into the ASEAN Engineering Register (AER) to

include the registration of the entire engineering team comprising the Engineers, Engineering Technologists, Technicians and related Associates.

The objectives of the ASEAN Engineer Register are as follows:

1. Bigger market for expertise.
2. Better employment prospects.
3. Greater avenue for sharing of knowledge, expertise and technology.
4. Increased related business potential.
5. Wider networking and strategic alliances.
6. More potential for research and development.

AER Membership (active as of January 2021)

APPENDIX B

MEMBER ORGANISATIONS	ENGINEER			TECHNOLOGIST			TECHNICIAN			TOTAL MEMBERS
Country	Total AE	AAE	Active (AE+AAE)	AET	AAET	Active (AET+AAET)	AT	AAT	Active (AT+AAT)	Active
Brunei	48	5	**53**			**0**			**0**	53
Cambodia	461	194	**655**	1		**1**			**0**	656
Indonesia	1068	7	**1,075**			**0**			**0**	1,075
Laos PDR			**0**			**0**			**0**	0
Malaysia	683	1,810	**2,493**	45	179	**224**	10	117	**127**	2,844
Myanmar	943	655	**1,598**	26		**26**	340		**340**	1,964
Philippines	2288	589	**2,877**	12		**12**	14		**14**	2,903
Singapore	42	4	**46**	3		**3**			**0**	49
Thailand	66	3	**69**			**0**	4		**4**	73
Vietnam	323	2	**325**			**0**			**0**	325
	5,922	**3,269**	**9,191**	**87**	**179**	**266**	**368**	**117**	**485**	**9,942**

ASEAN Engineer Certificate

ASEAN Engineer Medal of Membership

It is to be noted that neither the certificate nor the medal feature the ASEAN Logo.

I am taken aback that there is no mention of the ASEAN Mutual Recognition Agreement for Engineering Services in all the documents of the ASEAN Engineer Register. I consider it important that the ASEAN imprimatur should have been employed to the full to raise the status of the ASEAN Engineer. This would have contributed greatly to his/her mobility in gainful employment abroad.

The ASEAN Engineer was recognised by the Gulf States due to the umbrella ASEAN MRA. ASEAN Engineers from the Philippines were elevated from technologist to engineer status with relevant uplift of renumeration and other benefits. African engineers will get much more benefits if the African Engineers Register is under FAEO.

5.0 FEIAP Accreditation

The Federation of Engineering Institutions of Asia and the Pacific (FEIAP) is an international non-profit professional organization that was founded on 6 July 1978 as the Federation of Engineering Institutions in South East Asia and Pacific (FEISEAP). FEIAP is an International Member of WFEO.

About 15 years ago, FEIAP made the accreditation of engineering education qualifications to FEIAP's Education and Accreditation Guidelines as its priority agenda. This agenda is being extended to Africa under the AAP Accord.

The degrees accredited by the following bodies are considered to be in full compliance with best practices as stipulated in FEIAP Engineering Education and Accreditation Guidelines (for APEC Engineer Academic Requirements Level):

i. Accreditation Board for Engineering Education of Korea (ABEEK), Korea
ii. Board of Engineers (BEM), Malaysia
iii. China Association for Science and Technology (CAST), China
iv. Engineers Australia (EA), Australia (1989)
v. The Hong Kong Institution of Engineers (HKIE), Hong Kong China
vi. Institute of Engineering Education Taiwan (IEET)
vii. Institution of Engineers Singapore (IES), Singapore
viii Japan Accreditation Board for Engineering Education, (JABEE), Japan
ix National Board of Accreditation (NBA), India
x Pakistan Engineering Council (PEC), Pakistan
xi Instituto de Calidad y Acreditacion de Programas de Computacion, Ingenieria y Tecnologia (ICACIT), Peru
xii Philippine Technological Council (PTC), Philippines
xiii Myanmar Engineering Council (MEngC), Myanmar

The degrees accredited by the following bodies are considered to be in compliance with best practices as stipulated in FEIAP Engineering Education and Accreditation Guidelines (for Nation Building Level):

i. The Council for the Regulation of Engineering in Nigeria (Coren), Nigeria.

It is to be noted that FEIAP has a membership of 25 economies including the Netherlands, Peru, Nigeria and Rwanda outside the Asia and the Pacific regions. The Asia region has some 48 countries and the Pacific region numbers some 30 countries, making a grand total of 78 countries. Thus, FEIAP cannot be said to represent the engineering community of Asia and the Pacific.

This is typical of a regional NGO. The saving grace for FEIAP is its open attitude of welcoming all and any national engineering organisations from outside the Asia and the Pacific regions to join as members. The FEIAP Presidency was held by China. China is undoubtedly the world leader of engineering from design, manufacture, construction, operation and maintenance as demonstrated by the widespread engineering infrastructure and construction projects in all engineering sectors in the developing world. In the post COVID-19 world, China will increasingly be the global engineering standard bearer, I am confident that more and more national engineering organisations within the Africa, Asia and the Pacific will join FEIAP to participate and benefit the AAP Accord.

6.0 The Washington Accord

The Washington Accord is an international Agreement between bodies responsible for accrediting engineering degree programs. Originally signed in 1989, the Washington Accord, is a multi-lateral agreement between bodies responsible for accreditation or recognition of tertiary-level engineering qualifications within their jurisdictions who have chosen to work collectively to assist the mobility of professional engineers. The Accord acknowledges that accreditation of engineering academic programmes is a key foundation for the practice of engineering at the professional level in each of the countries or territories covered by the Accord. The Accord outlines the mutual recognition, between the participating bodies, of accredited engineering degree programmes. It also establishes and benchmarks the standard for professional engineering education across those bodies.

Currently there are twenty signatories that make up the Washington Accord. There are also eight organisations, who hold provisional signatory status.

Signatories have full rights of participation in the Accord. Qualifications accredited or recognized by other signatories are recognised by each signatory as being substantially equivalent to accredited or recognised qualifications within its own jurisdiction.

From Washington Accord website, the Signatories are:

i. Korea - Represented by Accreditation Board for Engineering Education of Korea (ABEEK) (2007)
ii. Russia - Represented by Association for Engineering Education of Russia (AEER) (2012)
iii. Malaysia - Represented by Board of Engineers Malaysia (BEM) (2009)
iv. China - Represented by China Association for Science and Technology (CAST) (2016)
v. South Africa - Represented by Engineering Council South Africa (ECSA) (1999)
vi. New Zealand - Represented by Engineering New Zealand (EngNZ) (1989)
vii. Australia - Represented by Engineers Australia (EA) (1989)
viii. Canada - Represented by Engineers Canada (EC) (1989)
ix. Ireland - Represented by Engineers Ireland (EI) (1989)
x. Hong Kong China - Represented by The Hong Kong Institution of Engineers (HKIE) (1995)
xi. Chinese Taipei - Represented by Institute of Engineering Education Taiwan (IEET) (2007)
xii. Singapore - Represented by Institution of Engineers Singapore (IES) (2006)
xiii. Sri Lanka - Represented by Institution of Engineers Sri Lanka (IESL) (2014)
xiv. Japan - Represented by JABEE (2005)
xv. India - Represented by National Board of Accreditation (NBA) (2014)

xvi. United States - Represented by Accreditation Board for Engineering and Technology (ABET) (1989)
xvii. Turkey - Represented by Association for Evaluation and Accreditation of Engineering Programs (MÜDEK) (2011)
xviii. United Kingdom - Represented by Engineering Council United Kingdom (ECUK) (1989)
xix. Costa Rica - Represented by Colegio Federado de Ingenieros y de Arquitectos de Costa Rica (CFIA) (2020)
xx. Pakistan - Represented by Pakistan Engineering Council (PEC) (2017)
xxi. Peru - Represented by Instituto de Calidad y Acreditacion de Programas de Computacion, Ingenieria y Tecnologia (ICACIT) (2018)

Provisional Signatories are recognised as having appropriate systems and processes in place to develop towards becoming a full signatory

- Chile - Represented by Agencia Acreditadora Colegio De Ingenieros De Chile S A (ACREDITA CI)Provisional Status Approved in 2018.
- Thailand - Represented by Council of Engineers Thailand (COET)Provisional Status Approved in 2019.
- Bangladesh - Represented by The Institution of Engineers Bangladesh (IEB)Provisional Status Approved in 2016.
- Mexico - Represented by Consejo de Acreditación de la Enseñanza de la Ingeniería (CACEI)Provisional Status Approved in 2016.
- Philippines - Represented by Philippine Technological Council (PTC)Provisional Status Approved in 2016.
- Myanmar - Represented by Myanmar Engineering Council (MEngC) Provisional Status Approved in 2019.
- Indonesia - Represented by Indonesian Accreditation Board for Engineering Education (IABEE)Provisional Status Approved in 2019.

Since its establishment in 1989, the Washington Accord has only 20 odd full members (signatories) as against the UN membership of 193 countries. The only African nation is South Africa.

To me. It is an exclusive club retaining much of the flavour of its English speaking founding nations that in 1989 rule the world of engineering. I would like to suggest Africa cannot afford to wait for Washington Accord.

7.0 Recommendations

In the quest for African integration through the building of continental wide physical and virtual infrastructure for sustainable development, African Union would require the committed participation of the African engineering community whose stakeholders must have the necessary internationally recognised engineering education qualifications and the competent post graduate professional experience. This will enable the mobility and mobilization of African engineers for projects and enterprises throughout Africa. Thus it is urgent that the African Union establishes urgently an Engineering Accreditation and Mobility Agency to achieve the above objectives.

Through the FEIAP/FEIAP AAP Agreement and other subsequent Agreements between African Union and ASEAN African Union will be able to marshal the considerable resources outside Africa to expedite the achievements of the engineering and mobility agenda in Africa. In the mobilization of such assistance from outside Africa, the clout of African Union is very important.

I would strongly recommend that African Union appoints FAEO to administer the African Accord and the African Engineers Register . This will assure that national engineering organisation in every African Union member nation will join FAEO so that FAEO will become the one stop organisation to assist the AU in all her engineering infrastructure and construction initiatives and projects like the WBG/AU African Digital Moonshot Project. In the working level, FAEO has very cordial relations with FEIAP and AFEO to avail African Accord and African Engineers Register of any and all assistance in implementation.

Thus the collaboration of African Union and FAEO in the setting up and operation of the African Accord and the African Engineers Register is a win-win partnership.

18 May 2021 Kuala Lumpur updated 25 January 2024

ASEAN Framework Agreement on Mutual Recognition Arrangements

The Governments of Brunei Darussalam, the Republic of Indonesia, the Lao People's Democratic Republic, Malaysia, the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand and the Socialist Republic of Vietnam, Member States of the Association of Southeast Asian Nations (hereinafter referred to as "ASEAN");

MINDFUL that in 1992 the ASEAN Heads of Government declared that an ASEAN Free Trade Area shall be established in the region and that in 1995 they agreed to accelerate its implementation to the year 2003;

NOTING the Agreement on the Common Effective Preferential Tariff (CEPT) Scheme for the ASEAN Free Trade Area signed on 28 January 1992, which provides for the border and non-border areas of cooperation to supplement and complement the liberalisation of trade including, among others, the harmonisation of standards, reciprocal recognition of tests and certification of products;

RECALLING that in 1995, the ASEAN Heads of Governments adopted, in the Bangkok Summit Declaration, the Agenda for Greater Economic Integration, which includes, among others, the introduction of greater transparency in standards and conformance, the alignment of national standards with international standards and undertaking projects to facilitate mutual recognition arrangements (hereinafter referred to as "MRAs") to facilitate greater intra-regional trade;

RECOGNISING that MRAs for conformity assessment activities could be an important means of eliminating Technical Barriers to Trade and enhancing market access and that such mutual recognition could be of particular interest to small and medium-sized businesses in ASEAN;

RECOGNISING further that MRAs could contribute positively in encouraging greater international harmonization of standards and regulations and that any such MRAs would require confidence in the other Member States' capacity and competence to test or assess conformity to a Member State's own requirements;

MINDFUL of the different levels of infrastructure for Standards and Conformity Assessment and economic development of ASEAN Member States;

REITERATING their commitments under the World Trade Organization Agreement on Technical Barriers to Trade and noting that the Agreement encourages Contracting Parties to enter into negotiations for the conclusion of agreement for the mutual recognition of results of each other's conformity assessment; and

DESIRING to formulate a framework agreement to deepen and broaden cooperation on Standards and Conformance in ASEAN and to provide a basis for developing and implementing MRAs in specific product sectors, (hereinafter referred to as "Sectoral MRAs"), to facilitate the realization of the ASEAN Free Trade Area.

HAVE AGREED AS FOLLOWS :

ARTICLE 1

DEFINITIONS

1. General terms concerning conformity assessment used in this Framework Agreement and the Sectoral MRAs shall have the meaning given in the definitions contained in the Guide 2 (1996 edition) of the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) with the exception of the following terms which shall contain definitions herein:

"Conformity Assessment" means systematic examination to determine the extent to which a product, process or service fulfills specified requirements;

"Conformity Assessment Body" means a body whose activities and expertise include performance of all or any stage of the conformity assessment process except for accreditation;

"Regulatory Authority" means an entity that exercises a legal right to control the import, use or sale of products within a Member State's jurisdiction and may take enforcement action to ensure that products marketed within its jurisdiction comply with legal requirements.

2. In addition, the following terms and definitions shall apply to this Framework Agreement and the Sectoral MRAs:

"Designation" means the authorisation by a Designating Body of a Conformity Assessment Body to perform conformity assessment activities as specified under this Framework Agreement and the relevant Sectoral MRAs;

"Designating Body" means a body appointed by a Member State to a Sectoral MRA, with responsibility to identify and monitor Conformity Assessment Bodies as specified under this Framework Agreement and the relevant Sectoral MRAs.

ARTICLE 2

OBJECTIVES

The objectives of this Framework Agreement are:

a. to stipulate the general principles for developing Sectoral MRAs amongst Member States and other related cooperative activities to facilitate elimination of technical barriers to trade within ASEAN; and
b. to stipulate the general conditions under which each Member State to a Sectoral MRA shall accept or recognize results of conformity assessment procedures, produced by the Conformity Assessment Bodies of the other Member States to the Sectoral MRA in question in assessing conformity to the requirements, as specified in the Sectoral MRA.

ARTICLE 3

GENERAL PROVISIONS

1. Member States to the Sectoral MRAs shall accept or recognize the conformity assessment results, which have been issued in accordance with the provisions in the Sectoral MRAs, by the listed Conformity Assessment Bodies of other Member States to the Sectoral MRAs.

2. Where sectoral transition arrangements have been specified in the Sectoral MRAs, the above obligations shall apply following the successful completion of those transition arrangements.

3. Member States to the Sectoral MRAs shall ensure that the Designating Bodies specified in the Sectoral MRAs have the power and competence in their respective territories to carry out decisions required of them under this Framework Agreement and the relevant Sectoral MRAs.

4. Member States to the Sectoral MRAs shall ensure that the Conformity Assessment Bodies listed in the Sectoral MRAs fulfill the conditions of eligibility to assess conformity in relation to requirements as specified in the Sectoral MRAs, and shall observe the procedures set out in Article 6 of this Framework Agreement.

5. Member States shall strengthen and enhance existing cooperation efforts in confidence building and develop cooperation in areas that are not covered by existing cooperation arrangements, through inter alia:

a. harmonization of standards with relevant international standards, particularly those relevant to the Sectoral MRAs;
b. establishing or improving of infrastructure in calibration, testing, certification and accreditation to meet relevant international requirements;
c. actively participating in relevant arrangements undertaken by specialist regional and international bodies;
d. effectively using the existing MRAs developed by regional and international bodies which majority of ASEAN Member States are parties to;
e. research and development; and
f. exchange of information and training .

6. Member States shall identify sectors for developing MRAs based on the following criteria:

a. with special focus on but not limited to the list of 20 priority product groups identified for harmonization of standards;
b. the volume of intra-ASEAN trade affected;
c. the existence and extent of technical barriers to trade;
d. the readiness of technical infrastructure in the majority of Member States, which shall include the existence of Conformity Assessment Bodies that satisfy the procedures and criteria stated in Article 6, clause 1; and
e. the interest of the majority of Member States.

7. All Sectoral MRAs are intended to be multilateral agreements in which all Member States are encouraged to participate. However, taking cognizance of paragraph 3 of Article I of the Framework Agreement on Enhancing ASEAN Economic Cooperation

signed on 28 January 1992 in Singapore, two or more Member States may proceed first if other Member States are not ready to participate in the Sectoral MRAs.

8. All documents issued for the purpose of information exchange, verification, provision of evidence and other activities arising from obligations of both the Framework Agreement and Sectoral MRAs, if not in English, shall be accompanied by certified translated copies in English.

ARTICLE 4

ELEMENTS OF SECTORAL MRA

1. A Sectoral MRA shall include:

a. scope and coverage with respect to products;
b. a list of the relevant legislative, regulatory and administrative provisions pertaining to the conformity assessment procedures and technical regulations for the specified products and provisions to update other Member States to the Sectoral MRA on changes;
c. a list of Designating Bodies;
d. the procedures and criteria for listing Conformity Assessment Bodies;
e. the current list of agreed Conformity Assessment Bodies and a statement of the scope of the conformity assessment and relevant procedures for which each has been accepted;
f. a description of the mutual recognition obligations;
g. a sectoral transition arrangement that provides for a specified time period where Member States to a Sectoral MRA require time to implement legislative or regulatory changes to effect the Sectoral MRA;
h. a list of contact points, who shall not be members of the relevant Joint Sectoral Committee;
i. provisions for the establishment of a Joint Sectoral Committee; and
j. additional provisions as required.

2. The Sectoral MRAs may include a statement or arrangement related to mutual acceptance of the standards or technical regulations or mutual recognition of the equivalence of such standards or technical regulations.

ARTICLE 5

JOINT SECTORAL COMMITTEE

1. For each Sectoral MRA, a Joint Sectoral Committee shall be established, which shall be responsible for the effective functioning of that Sectoral MRA. The Joint Sectoral Committee shall comprise one official representative designated by each Member State to the Sectoral MRA. The representative shall not be from a Conformity Assessment Body.

2. The Joint Sectoral Committee may consider any matter and take appropriate actions relating to the effective functioning of the Sectoral MRA. In particular it shall be responsible for:

a. listing, suspension, withdrawal, removal, reinstating and verification of Conformity Assessment Bodies in accordance with the Sectoral MRA;
b. amending transition arrangements in the Sectoral MRA;
c. providing a forum for discussion of issues that may arise concerning the implementation of the Sectoral MRA; and
d. considering ways to enhance the operation of the Sectoral MRA.

3. The Joint Sectoral Committee shall take its decisions by consensus.

ARTICLE 6

LISTING OF CONFORMITY ASSESSMENT BODIES

The following procedures shall apply with regard to the listing of Conformity Assessment Bodies in a Sectoral MRA:

1. Each Designating Body specified in a Sectoral MRA shall identify Conformity Assessment Bodies for listing, in accordance with the procedures and criteria set forth in that Sectoral MRA and shall apply one of the following ways to demonstrate technical competence of the Conformity Assessment Bodies:

a. accreditation by an accreditation body that is a signatory to a regional or international MRA, which is conducted in conformance with the relevant ISO/IEC Guides; or
b. participation in regional/international mutual recognition arrangements for testing and certification bodies, which are conducted in conformance with the relevant ISO/IEC Guides; or
c. regular peer evaluations which are conducted in conformance with the relevant ISO/IEC Guides.

2. The Designating Body shall ensure that identified Conformity Assessment Bodies have adequate knowledge of the applicable technical regulations.

3. Designating Bodies relevant to the Sectoral MRAs shall forward in writing required details of all Conformity Assessment Bodies that they identified, to the relevant Joint Sectoral Committee and the ASEAN Secretariat for the Committee members' confirmation or opposition.

a. Within 60 days following receipt of a Designating Body's submission, the members of the Joint Sectoral Committee shall indicate their position regarding either their confirmation or their opposition, to the ASEAN Secretariat. No response within 60 days shall be taken as abstention. Upon confirmation, the inclusion of the proposed Conformity Assessment Body or Bodies in the list of accepted Conformity Assessment Bodies shall take effect;
b. If one or more of the Member States to the Sectoral MRA requests verification of the technical competence or compliance of a proposed Conformity

Assessment Body, such request shall be made an objective and reasoned manner in writing to the ASEAN Secretariat, which shall forward it to the relevant Joint Sectoral Committee for a decision. The Joint Sectoral Committee may decide that the body concerned be more fully verified in accordance with Article 9 of this Framework Agreement; and

c. The proposed Conformity Assessment Body shall not be included in the list of accepted Conformity Assessment Bodies in the applicable Sectoral MRA until a decision has been made to include such Conformity Assessment Body.

ARTICLE 7

SUSPENSION OF LISTED CONFORMITY ASSESSMENT BODIES

The following procedures shall apply with regard to the suspension of a Conformity Assessment Body listed in a Sectoral MRA:

a. Any Member State to a Sectoral MRA which contests the technical competence or compliance of a listed Conformity Assessment Body shall, through its contact point to submit a proposal to suspend such a Conformity Assessment Body, to the relevant Joint Sectoral Committee and the ASEAN Secretariat. Such contestation shall be exercised when justified in an objective and reasoned manner in writing;
b. The ASEAN Secretariat shall promptly inform the Conformity Assessment Body concerned. The Conformity Assessment Body shall be given an opportunity to present information in order to refute the contestation or to correct the deficiencies which form the basis of the contestation;
c. Any such contestation shall be discussed by the relevant Joint Sectoral Committee, which may decide to suspend the Conformity Assessment Body in question;
d. If the matter has not been resolved by the Joint Sectoral Committee within 21 days of the notice of contestation, the Conformity Assessment Body shall be suspended upon the request of the contesting Member State;
e. Where the Joint Sectoral Committee decides that verification of technical competence or compliance is required, such verification shall be carried out in accordance with Article 9 of this Framework Agreement;
f. Upon the suspension of a Conformity Assessment Body listed in a Sectoral MRA, Member States to the Sectoral MRA are no longer obligated to accept or recognize the results of conformity assessment procedures performed by that Conformity Assessment Body subsequent to suspension. Member States to the Sectoral MRA shall, subject to Article 11, continue to accept the results of conformity assessment procedures performed by that Conformity Assessment Body prior to suspension; and
g. The suspension shall remain in effect until an agreement has been reached by Member States to the Sectoral MRA upon the future status of that Conformity Assessment Body.

ARTICLE 8

REMOVAL OF LISTED CONFORMITY ASSESSMENT BODIES

The following procedures shall apply with regard to the removal of a listed Conformity Assessment Body from a Sectoral MRA:

a. A Member State to a Sectoral MRA proposing to remove a Conformity Assessment Body listed in a Sectoral MRA shall, through its contact point for the Sectoral MRA, forward its proposal in an objective and reasoned manner in writing to the relevant Joint Sectoral Committee and the ASEAN Secretariat;
b. Such a Conformity Assessment Body shall be promptly notified by the ASEAN Secretariat and shall be provided a period of at least 30 days from receipt of the notification to provide information in order to refute or to correct the deficiencies which form the basis of the proposed removal;
c. Within 60 days following receipt of the proposal, the members of the Joint Sectoral Committee shall indicate their positions regarding either their confirmation or their opposition to the ASEAN Secretariat. No response within 60 days shall be taken as abstention. Upon confirmation, the removal from the Sectoral MRA of the proposed Conformity Assessment Body or Bodies shall take effect;
d. If the Joint Sectoral Committee finds sufficient grounds based on the evidence submitted, it may decide to carry out a joint verification of the body concerned. Pending completion of the joint verification, the Conformity Assessment Body shall not be removed from the list of Conformity Assessment Bodies in the applicable Sectoral MRA; and
e. Subsequent to the removal of a Conformity Assessment Body listed in a Sectoral MRA, Member States to the Sectoral MRA shall, subject to Article 11, continue to accept the results of conformity assessment procedures performed by that Conformity Assessment Body prior to removal.

ARTICLE 9

VERIFICATION OF TECHNICAL COMPETENCE AND COMPLIANCE OF CONFORMITY ASSESSMENT BODIES

1. The Designating Bodies shall ensure that Conformity Assessment Bodies identified by them will be available for verification of their technical competence and compliance with applicable requirements when required by the relevant Joint Sectoral Committee.
2. Any request for verification of technical competence or compliance of the Conformity Assessment Body, shall be justified in an objective and reasoned manner and in writing to the ASEAN Secretariat, which shall forward it to the relevant Joint Sectoral Committee for a decision.
3. Where the Joint Sectoral Committee decides that verification of technical competence or compliance is required, it will be carried out in a timely manner, jointly by all interested Member States to the relevant Sectoral MRA, based on the procedures and criteria set forth in the relevant Sectoral MRA and the provisions of Article 6 of this Framework Agreement.

4. The result of this verification shall be discussed by the relevant Joint Sectoral Committee with a view to resolving the issue as soon as possible.

ARTICLE 10

MONITORING OF CONFORMITY ASSESSMENT BODIES

1. Designating Bodies shall ensure that Conformity Assessment Bodies identified by them and listed in a Sectoral MRA are capable and remain capable of properly assessing conformity of products or processes, as applicable, and as covered in the applicable Sectoral MRA. Designating Bodies shall maintain monitoring of such Conformity Assessment Bodies listed in a Sectoral MRA by means of regular audit or assessment.
2. Dsignating Bodies shall compare methods used to verify that the Conformity Assessment Bodies listed by the Joint Sectoral Committee comply with the relevant requirements of the Sectoral MRAs.
3. Designating Bodies shall consult as necessary with their counterparts in other Member States to the Sectoral MRAs, to ensure the maintenance of confidence in conformity assessment procedures. This consultation may include joint participation in audits/inspections related to conformity assessment activities or other assessments of Conformity Assessment Bodies listed in a Sectoral MRA.
4. Designating Bodies shall consult, as necessary, with relevant Regulatory Authorities to ensure that all technical requirements identified in the relevant Sectoral MRAs are satisfactorily addressed.

ARTICLE 11

PRESERVATION OF REGULATORY AUTHORITY

1. Nothing in this Framework Agreement shall be construed to limit the authority of a Member State to determine, through its legislative, regulatory and administrative measures, the level of protection it considers appropriate for safety; for protection of human, animal, or plant life or health; for the environment and for consumers.
2. Nothing in this Framework Agreement shall be construed to limit the authority of a Regulatory Authority to take all appropriate and immediate measures whenever it ascertains that a product may:

   a. compromise the health or safety of persons in its territory;

   b. not meet the legislative, regulatory, or administrative provisions within the scope of the applicable Sectoral MRA ; or

   c. otherwise fail to satisfy a requirement within the scope of the applicable Sectoral MRA.

If the Regulatory Authority takes such measures, it shall inform its counterpart authority in the affected Member State and other Member States to the relevant Sectoral MRA of such measures taken, providing reasons, within a period of time defined in the relevant Sectoral MRA.

ARTICLE 12

CONSULTATIONS AND SETTLEMENT OF DISPUTES

1. Member States shall, at the written request of another Member State, enter into consultations with a view to seeking a prompt, equitable and mutually satisfactory solution, if that Member State considers that:

   a. an obligation under this Framework Agreement has not been fulfilled, is not being fulfilled, or may not be fulfilled; or

   b. any objective of this Framework Agreement is not being achieved or may be frustrated.

2. Any differences between Member States concerning the interpretation or application of this Framework Agreement and the Sectoral MRAs shall, as far as possible, be settled amicably between the Member States concerned or within the relevant Joint Sectoral Committee if applicable. If a settlement cannot be reached, thus, it shall be subjected to the Dispute Settlement Mechanism of ASEAN in accordance with the Protocol on Dispute Settlement Mechanism, which was signed on 20 November 1996 in Manila, the Philippines.

ARTICLE 13

INSTITUTIONAL ARRANGEMENTS

1. Progress of the implementation of this Framework Agreement shall be reported to the AFTA Council through the Senior Economic Officials Meeting (SEOM). The SEOM shall monitor all aspects relating to the implementation of this Framework Agreement. The Joint Sectoral Committees shall monitor all aspects relating to the implementation of the relevant Sectoral MRAs.
2. The ASEAN Consultative Committee for Standards and Quality (ACCSQ) and the ASEAN Secretariat shall provide the support for coordinating and reviewing the implementation of this Framework Agreement and the Sectoral MRAs and assist the SEOM and the Joint Sectoral Committees in all matters relating thereto.
3. The ACCSQ shall be the forum for linkages with industries with respect to the implementation of this Framework Agreement and the Sectoral MRAs.

ARTICLE 14

TECHNICAL ASSISTANCE AND FUNDING

1. Member States shall, if requested, advise other Member States, and shall grant them technical assistance on mutually agreed terms and conditions, where applicable on building up and/or maintaining technical competence of relevant Conformity Assessment Bodies in their territories so that they can fulfil the obligations as specified in the Sectoral MRAs or participate in the Sectoral MRAs.
2. Member States which are members or participants of international or regional systems for conformity assessment shall, if requested, advise other Member States, and shall grant them technical assistance on mutually agreed terms and conditions, where applicable regarding the establishment of the institutions and legal framework which would enable them to fulfil the obligations of membership or participation in such systems.
3. Member States to a Sectoral MRA may engage the services of Conformity Assessment Bodies of other Member States to undertake the requisite conformity assessment activities, should they not have their own facilities to do so.
4. Member States shall accord priority to funding for activities under this Framework Agreement and the Sectoral MRAs. Expenses incurred as a result of any activity undertaken by a Member State to fulfill the objectives of this Framework Agreement and the Sectoral MRAs shall be borne by the Member State concerned unless all Member States decide otherwise.

ARTICLE 15

CONFIDENTIALITY

1. Member States shall maintain, to the extent permitted under its laws and regulations, the confidentiality of information exchanged under this Framework Agreement and the Sectoral MRAs.
2. Member States shall take all precautions reasonably necessary to protect information exchanged under this Framework Agreement and the Sectoral MRAs from unauthorized disclosure.

ARTICLE 16

ACCESSION OF NEW MEMBERS

New Members of ASEAN may accede to this Framework Agreement through the signing and depositing of the instrument of accession to this Framework Agreement with the Secretary-General of ASEAN, who shall promptly furnish each Member State a certified copy thereof.

ARTICLE 17

RIGHTS AND OBLIGATIONS UNDER EXISTING INTERNATIONAL AGREEMENTS OR CONVENTIONS

This Agreement or any actions taken thereto shall not affect the rights and obligations of the contracting Member States under any existing international agreements or conventions to which it is also a party.

ARTICLE 18

FINAL PROVISIONS

1. The provisions of this Framework Agreement may be reviewed or amended by agreement of all Member States.
2. Member States shall undertake appropriate measures to fulfill the agreed obligations arising from this Framework Agreement.
3. Member States shall make no reservations with respect to any of the provisions of this Framework Agreement.
4. This Framework Agreement shall be deposited with the Secretary General of ASEAN, who shall promptly furnish each Member State a certified copy thereof.
5. This Framework Agreement shall enter into force upon deposit of instruments of ratification or acceptance by all signatory Governments with the Secretary-General of ASEAN.

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments, have signed this ASEAN Framework Agreement on Mutual Recognition Arrangements. DONE at Hanoi, Vietnam, on the 16th day of December 1998, in a single copy in the English Language.

July 18th, 2012