



AFSEC

INFORMATION BULLETIN

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1. Preamble

In Response to the declaration of the First Conference of African Ministers responsible for electrical energy, 20th-24th March 2006, as recorded by the African Union in *Declaration on “The common vision and strategic framework for a continental policy of the African electricity sector”* [AU/MIN/EI.En/Decl.(I)], and specifically item 11 of the Plan of Action recorded in AU/MIN/EI.En/Pl.Ac.(I), wherein the Conference resolved to establish the African Electrotechnical Standardization Commission (AFSEC); and

Also further to the Algiers Declaration of the African Union Conference of Ministers in charge of Energy “Launching of the African Energy Commission (AFREC)” 15th -17th February 2008, Algiers, Algeria [AU/EXP/EN/Decl.(III)], wherein Member States committed to support efforts towards the operationalization of AFSEC as a subsidiary body of the African Energy Commission (AFREC);

The Inauguration of the African Electrotechnical Standardization Commission (AFSEC) took place at its Constitutive General Assembly held in Accra, Ghana on 26th - 28th February 2008, with 10 founding members from: Benin, Côte d’Ivoire, Egypt, Ghana, Kenya, Libya, Nigeria, Senegal, South Africa and Sudan.

Necessary procedural matters within the African Union Commission in collaboration with the African Energy Commission (AFREC) are expected in due course to formalize the relationship between AFSEC and AFREC and the accountability of AFSEC to the AU. Thereafter, a formal host country agreement would be negotiated with the country chosen to host AFSEC

As an interim arrangement, the appointed Executive Secretary continues to operate from South Africa, under an arrangement with the national electricity company, Eskom, during the start-up phase of AFSEC. The South African Department of Energy has indicated its willingness to consider support for an office for AFSEC.

2. What is AFSEC?

The African Electrotechnical Standardization Commission (AFSEC) has been established with the support of the African Union to provide a collaborative framework for stakeholders in African member states, through their national electrotechnical committees, to harmonize the electrotechnical standards, and the associated conformity assessment requirements of Africa. Such harmonization will be primarily in support of electrical infrastructure development initially, and also in future for facilitating intra-Africa trade and global trade with Africa in electrotechnical materials and equipment. Its establishment is intended to fill what

is a significant gap in standardization structures in Africa; noting that similar regional bodies have already function in most other parts of the world; for example, CENELEC in Europe, whose “EN” harmonised standards underpin trade with, and within the electrotechnical industry in the EU, and the technical regulations that govern such trade. Thus, in the field of electricity, electronics and related technologies, the African Electrotechnical Standardization Commission (AFSEC) is responsible for

- Identification of existing standards and prioritization of standards needs,
- Harmonizing existing standards, through either the adoption of international standards; or where necessary their adaptation to African conditions,
- Where there is a need, identifying draft standards to be developed by the members of AFSEC for adoption, and
- Recommending harmonized standards for application by the appropriate bodies of the AU.

Such applications could where appropriate be used as the basis for technical regulations where such regulation at a continental level are deemed necessary in the interests of safety, health and the environment at a continental level.

3. Summarized background leading to the establishment of AFSEC

Standardization, in the context of technology in general, comprises the processes and structures to make most effective use of known technologies. Ideally, all stakeholders internationally would contribute to a single organisation that produces standards and conformity assessment schemes that are adopted worldwide by all interested and affected parties, typically as national standards. In practice standardization happens at different levels, depending on the needs and priorities of stakeholders nationally, sub-regionally, and at a continental level. There are often political, economic, environmental and other factors that shape how standardization is achieved at each level, while taking account of global imperatives such as the WTO treaties.

During 2005, support for the establishment of an African Electrotechnical Standardization Commission to be known by the acronym “AFSEC” was confirmed by key stakeholders in Africa, including the African Union, **AU**; the African Energy Commission, **AFREC**; the Union of Producers, Transporters and Distributors of Electric Power in Africa, **UPDEA**; and the African Organisation for Standardization, **ARSO**; and with the support of the International Electrotechnical Commission, **IEC**.

The inauguration of the African Energy Commission in Algiers (its host country) at the conference of African Ministers of Energy on 17th February 2008, included a declaration calling on members states to support the operationalization of AFSEC. Thereafter, the inaugural meeting and constitutive general assembly of AFSEC was held in Accra on 28th February 2008.

4. Why has AFSEC been established?

The framework for agreement on technical standards in developed countries was established during the first half of the 20th century. The progressive establishment of the electricity supply networks in these countries was done against a background of maturing electrotechnical standards.

In contrast in Africa, the infrastructure to co-operate on electrotechnical standards has yet to develop at a continental level. With the exception of only a few countries, there has been little or no infrastructure established for standards to be reviewed and updated to be in line with progress in international standardization. It is recognized that agreement on technical standards is not a “nice to have” but an essential component of development. Agreement on standards is essential to establish and maintain the electrical infrastructure within and between member states to realize the goals of NEPAD, and to support most of the millennium development goals (MDGs).

Agreement on and application of standards will be a necessary condition for cost effective, safe and appropriate quality electrical goods for the general population, and to simulate African manufacture of such equipment and in the longer term facilitate worldwide exports of such equipment and materials in this sector from African states. Harmonization of standards for cross-border trade is also necessary to conform to the World Trade Organization treaties and to support intra-Africa trade.

While it can be expected in the longer term (perhaps decades) that there will be a gradual increase in the active involvement of individual African countries directly in international electrotechnical standardization through membership of the IEC, it is recognised that the capability for most African states is constrained both financially and technically for this to happen. Membership of AFSEC provides a more cost effective way for Africans to engage meaningfully in international electrotechnical standardization work through a regional body, pooling their resources, while gradually building capacity in the specialised fields of relevance to each country.

5. How will AFSEC be funded?

The basic financial support for AFSEC has to be provided by its members: the national electrotechnical committees through annual subscriptions, and any voluntary contributions by affiliate members and donor organisations. The current scale of fees, a 5-point scale based on the countries' GDP. The AFSEC statutes and rules of procedure are silent as to how a NEC raises the membership fee; that is an internal matter. However, it is unlikely that a national electrotechnical committee would be able to function in most countries without the support of the national standards body or its equivalent government department.

Additional support from the the African Energy Commission may be forthcoming for specific programmes or events, and in fact the AU contributed to the start up

phase through contributions from the budget of the African Energy Commission in 2008 and 2009. The latter provided the funding for the 2010 General Assembly.

The present funding model indicates that considerable additional funds will be required to operate AFSEC effectively and produce results in an acceptable time frame. It is recognised that relying on the contribution of members in the form of membership fees is unlikely to bring in sufficient funds to provide the support structure needed in the short term. An alternative funding model needs to be considered.

South Africa has already indicated some interest in providing support for the headquarters for AFSEC, even if for a limited period, with the understanding that the arrangement of Eskom South Africa providing part-time secretariat would continue until AFSEC is able to staff a permanent headquarters.

6. Membership as at October 2010

The following countries have thus far joined AFSEC and established national electrotechnical committees which function as the statutory members of AFSEC

Benin
Cote d'Ivoire
Egypt
Ghana
Kenya
Libya
Namibia
Nigeria
Rwanda
Senegal
South Africa
Sudan

Several other National electrotechnical committees are expected to join in the near future.

The following organisations have been accepted as affiliate members of AFSEC

AFREC – African Energy Commission
EAPP – Eastern African Power Pool
PIESA – Power Institute for East and Southern Africa
SAPP – Southern African Power Pool
SADCSTAN-The standardization expert group of SADC
UPDEA – Union of Producers, Transporters and Distributors of Electric Power in Africa

The other African power pools and other sub-regional bodies are expected to join AFSEC in future as affiliate members.

7. Operational activities

At the second general assembly of AFSEC it was agreed to commence the operational work of AFSEC through the formation of five technical committees, the function of which will be to mirror the activities of technical committees in the International Electrotechnical Commission (IEC).

These committees are:

TC 8: Systems aspects for electrical energy supply

TC 13: Electrical energy measurement, tariff- and load control

TC 57: Power systems management and associated information exchange

TC 64: Electrical installations and protection against electric shock

TC 77: Electromagnetic compatibility

It is intended that these technical committees will be populated with technical experts early in 2011 and should begin their work of harmonisation later in 2011. The main focus of the work is to support pan-African and cross border electrical infrastructure development programmes of the African Power Pools.

To help the efficient functioning of the AFSEC TCs, the IEC has agreed to make available its electronic collaboration tools, whereby AFSEC technical committee members can, via the IEC website, exchange and comment on documents, and have discussion forums.
