Presenter:

- Professional Registered Electrical Engineer
- Registered & Licenced Electrician.
- Having practiced Electrical Consulting & Contracting engineering.
- Involved in National & International Standardisation work in Electrotechnical field.
- Passionate about Standards, Safety, Energy Efficiency and clean energy.
- Determined to propagate the use of IEC Standards nationally and in Africa.

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Contents:-
1) Scope of ATC and linkage to IEC
2) Countries/organizations participating
3) Overview of SBP
4) Achievements thus far
5) Plans for Future work
6) Challenges
7) Conclusions/item for discussion during workshop

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# 1

TECHNICAL COMMITTEE SCOPE
SCOPE

- To prepare International Standards
  - Concerning protection against electric shock arising from equipment, from installations and from systems without limit of voltage,
  - For the design, erection and verification of all kind of electrical installations at supply voltage up to 1 kV AC, 1500 V DC. in collaboration with relevant Technical Committees.
  - In co-ordination with Technical Committees, concerning requirements additional for the design, erection and verification of electrical installations of buildings above 1 kV up to 35 kV

- To liaise with AFSEC TC’s 13 & 57
- To liaise with IEC TC 64

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# 2

TECHNICAL COMMITTEE
MEMBERSHIP

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<table>
<thead>
<tr>
<th>NAME</th>
<th>MEMBER COUNTRY</th>
<th>STATUS</th>
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<tbody>
<tr>
<td>Eng. Cyrus KHALUSI</td>
<td>KENYA</td>
<td>CHAIRMAN</td>
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<tr>
<td>Eng. Ahmed Abdel A. H. ALLAH</td>
<td>EGYPT</td>
<td>MEMBER Substitute</td>
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<tr>
<td>Eng. Mohamed SH AWQY</td>
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<td>Mr. Etienne BLAMY</td>
<td>COTE d’IVOIRE</td>
<td>MEMBER Substitute</td>
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<td>Mme Emma Bonny AMANI</td>
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<td>Mr. Harry KWAWUKUME</td>
<td>GHANA</td>
<td>MEMBER</td>
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<tr>
<td>Eng. Alewu ACHEMA</td>
<td>NIGERIA</td>
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<tr>
<td>Mr. Gauntier Mpanga MBUYA</td>
<td>DRC</td>
<td>MEMBER Substitute</td>
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<td>Mr. Alain Konzi MPIANA</td>
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<td>Mr. Olivier Mukeshimana</td>
<td>RWANDA</td>
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<td>Mr. Joseph NTWALI</td>
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<td>Eng. Tom SIMIYU</td>
<td>KENYA</td>
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<td>Eng. J. K. RUGANO</td>
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<td>Mr. Sebastian NAMUKOLO</td>
<td>ZAMBIA</td>
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<td>Mr. Lincoln CHANDA</td>
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<td>Mr Emil KUHANGA</td>
<td>NAMIBIA</td>
<td>MEMBER Substitute</td>
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<td>Dr. Maxwell MUYAMBO</td>
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# 3
OVERVIEW OF STRATEGIC BUSINESS PLAN

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AFSEC TC 64 - ELECTRICAL INSTALLATIONS & PROTECTION AGAINST ELECTRIC SHOCK

AFSEC
STRATEGIC BUSINESS PLAN - OVERVIEW

Historical Background:
Standardization of wiring rules - first discussed in 1908 up to 1965.
IEC Council set up a new Technical Committee, TC 64, in 1967 to harmonize the regulations and prepare relevant standards.
AFSEC TC 64 set up in 2011 with 4 other TCs

Strategic Business Plan considers:
Business Environment which includes:
General – environmental conditions in Africa.
Market demand – installations form interface between energy supply and equipment.
Trends in technology - renewable and distributed energy sources feeding systems at any point. Requires maintenance of regulations to ensure safety of people.
Market trends - to reduce carbon emissions by increasing the energy efficiency; use of prepaid energy meters as an energy saving mechanism.
Ecological environment - rules which enable an optimised installation of electrical equipment with respect to EMC effects

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System approach aspects

Electrical installation - system of interconnected components that must function together to ensure the correct functionality as well as the safety of people, equipment and the environment.

Objectives and strategies (3 to 5 years):

- participate in the IEC standards development process
- participate in the IEC process so as to ensure that the African contributions are taken into account
- identify relevant standards to be endorsed for adoption by member countries
- encourage member and non-member countries to adopt the identified relevant installation standards

Action plan:

- Recommendations to be submitted to the AFSEC MC
- Formulate working procedures for AFSEC TC 64
- Participate in the IEC Standards development process

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COMMITTEE ACHIEVEMENTS

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ACHIEVEMENTS THUS FAR

Working Procedures established; Working groups set up. Work carried out in physical meetings, emails and other communications.

IEC Standards considered and recommended for adoption:
- IEC 60364 – Low Voltage Electrical Installations
- IEC 61200 – Electrical Installation Guide
- IEC 60479 – Effects of current on humans and livestock
- IEC 61439 – Low Voltage Switchgear and Control gear Assemblies
- IEC 61140 – Basic Safety Publications
# 5

FUTURE WORK

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FUTURE WORK

✓ Maintenance of Standards recommended for adoption – Follow up any reviews done by IEC and notify AFSEC members accordingly.

✓ Preparation of Electrical Installation Guide with IEC guide as a basis. Consider the African environment and Local requirements. This project is scheduled to take approximately 18 months from commencement in August 2016.
# 6

CHALLENGES
CHALLENGES

1) **Financial constraints** - The TC accomplishes much more during physical meetings. However, most members find it to get travel and accommodation sponsorship. AFSEC has funded the physical meetings: Nairobi 2015 and Kigali 2016.

2) **Participation** - Member countries change their nominees more frequently than required. This interrupts consistency in TC work.

3) **Implementation** - Some Member countries do not adopt IEC standards as recommended by TC – may be due to national policy or implementation challenges.

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Concluding slide

Since inception in 2011, the TC has identified the major IEC standards on Electrical Installations and safety. These standards have been recommended for adoption.

The future work – Project: Electrical Installation Guide requires more work in accordance with the plan TC has drawn. Requires commitment from members/sponsors and resources to complete and publish.

Thank you!!

AFSEC

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