PIESA Standards Harmonization work

Presentation to AFSEC
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PRESENTATION LAYOUT

- POWER INSTITUTE FOR EAST AND SOUTHERN AFRICA
- VISION STATEMENT
- GOALS AND OBJECTIVES
- STANDARDISATION WORK
- FRAME FOR PREPARING STANDARDS
- PROCESS FOR DEVELOPING AND ACCEPTING PIESA STANDARDS
- SOME OF THE STANDARDS DEVELOPED SO FAR
- SUCCESS FACTORS
- CHALLENGES
- HARMONISATION OF STANDARDS IN SADC REGION
- HIGHLIGHTS OF STATEMENT OF COOPERATION (PIESA & SADC)
- POSSIBLE CONTRIBUTION TO AFSEC
- CONCLUSION
POWER INSTITUTE FOR EAST & SOUTHERN AFRICA (PIESA)

PIESA is a regional power utility association established in 1998 to coordinate information and technology sharing in specialized areas including standardization.

Membership comprises:
- Electricity power utilities in East and Southern Africa and
- Other organizations in the electricity distribution sector that wish to cooperate in the application of technology and information sharing in support of increased and sustainable access to electricity in these regions.
IN AFRICA, PIESA STANDARDS ARE RECOGNIZED BY ELECTRICITY DISTRIBUTION UTILITIES, THEIR SUPPLIERS, AND THEIR FUNDING AGENCIES, AS THE PREFERRED STANDARDS FOR ELECTRICITY DISTRIBUTION.
GOALS AND OBJECTIVES

- A CREDIBLE PROCESS OF CONSENSUS FOR DEVELOPING STANDARDS IS IN PLACE FOR PIESA

- THERE IS CO-OPERATION AND COMMITMENT OF UTILITIES AND THEIR SUPPLIERS FOR THE USE OF PIESA STANDARDS

- THERE IS CO-OPERATION WITH OTHER STAKEHOLDERS TO AVOID DUPLICATION
PIESA HAS AN ON-GOING PROGRAMME TO IDENTIFY EXISTING STANDARDS FOR COMMON APPLICATION BY ITS MEMBERS AND WHERE NECESSARY TO RATIONALIZE REQUIREMENTS IN PIESA STANDARDS INTENDED FOR USE BY ITS MEMBERS, THROUGH A CONSENSUS PROCESS.
FRAMEWORK FOR PREPARING PIESA STANDARDS

Approval & commitment to use

PIESA Board
All PIESA members

Standardization working group

project team1  project team2

manufacturers

Technical agreement rationalized range & type

compile draft standard

Consult /advise
• A PROPOSAL FOR A NEW SPECIFICATION (OR AMENDMENT) MAY BE INITIATED BY ANY STAKEHOLDER.

• THE PIESA STANDARDIZATION WORK GROUP (WG) STAKEHOLDERS INCLUDE

  • PIESA STANDARDIZATION WG MEMBERS,
  • OTHER PIESA WORK GROUPS, AND
  • OTHER MEMBERS OF PIESA AND AFFILIATES.
**STAGES OF PREPARING A NEW PIESA SPECIFICATION (BASED ON NRS 999)**

<table>
<thead>
<tr>
<th>STAGE</th>
<th>DESCRIPTION</th>
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<tr>
<td>1</td>
<td>INVESTIGATION AND PROJECT CONFIRMATION</td>
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<tr>
<td>2, N</td>
<td>WG DRAFT STAGE (N = \text{NUMBER OF DRAFTS})</td>
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<tr>
<td>3</td>
<td>WG, PIESA MEMBERS AND BOARD APPROVAL AND EDITING STAGE.</td>
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<tr>
<td>4</td>
<td>PUBLISHED – RELEASED BY PIESA SECRETARIAT ON THE PIESA WEBSITE.</td>
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**NOTE:** On-going maintenance of the specification also follows the above stages.
SUCCESS FACTORS

THE SUCCESS AND CREDIBILITY OF THE PROCESS DEPENDS CONSIDERABLY ON THE FOLLOWING CRITICAL SUCCESS FACTORS:

- THE COMMITMENT FROM ALL USERS TO USE THE RESULTANT SPECIFICATION;

- DISTRIBUTION OF THE DRAFTS BY WG MEMBERS TO OTHER RELEVANT PERSONNEL WITHIN THEIR ORGANIZATION FOR COMMENTS;

- COMMITMENT BY ALL PARTICIPANTS TO ACTIVELY SUPPORT AND CONTRIBUTE TO THE PROCESS AND THE PROGRAMME (TO MEET AGREED DEADLINES/MILESTONES); AND

- REFERENCING TO APPROPRIATE NATIONAL, REGIONAL, CONTINENTAL AND INTERNATIONAL STANDARDS TO SHOW PIESA MEMBER COUNTRIES’ COMMITMENT TO AGREEMENTS WITH REGIONAL AND WORLD TRADE ORGANIZATIONS AND ENHANCING EXPORT POTENTIAL OF PRODUCTS, WHERE RELEVANT.
STANDARDS DEVELOPED SO FAR

- OVER 20 SPECIFICATIONS PUBLISHED SINCE 2000

- PIESA 1001 Wood poles
- PIESA 002-2 fuse links for drop-out fuse link assemblies
- PIESA 003-2 LV UG cable systems Accessories
- PIESA 003-3 LV UG cable systems Application guide
- PIESA 1004 parts 1,2 &3 LV O/H cable systems
- PIESA 1006 Distribution transformers
- PIESA 1007 Stays and stay assemblies
- PIESA 1048 Power quality
Adoption NRS specifications as

- PIESA 1106, Electricity Payment System
- PIESA 1017, Standard Electricity Dispenser
- PIESA 1018, 4 parts ABC fittings
- PIESA 1020, ABC cable ties
- PIESA 1032, Pole top boxes
- PIESA 1062, Concentric service cable
- PIESA 1063, Split-concentric service cable
CHALLENGES

1 MANAGING THE STANDARDS DEVELOPMENT AND CONSENSUS PROCESS REQUIRES RESOURCES OTHER THAN WG MEMBERS THEMSELVES

SOLUTION

ESKOM (SA) TECHNOLOGY STANDARDIZATION DEPARTMENT [ESKOM CORPORATE] HAD ABSORBED THE PROJECT MANAGEMENT COST OF PIESA STANDARDS DEVELOPMENT
2. LOGISTICS TO GET ALL MEMBERS TO MEETINGS

SOLUTION:

- USE EMAIL AS FAR AS POSSIBLE - DOCUMENT PACKS BY COURIER TO ENSURE PROGRESS
CHALLENGES

3. READY ACCESS FOR ALL STAKEHOLDERS/ INTERESTED PARTIES TO THE PUBLISHED SPECIFICATIONS IN MEMBER COUNTRIES HAS STILL TO BE ADDRESSED

SOLUTIONS

- AGREEMENT WITH SANS (STANDARDS SOUTH AFRICA) TO EDIT AND SELL PIESA STANDARDS
- MOU WITH SADCSTAN UNDER CONSIDERATION
4. READY ACCESS TO REFERENCE STANDARDS

SOLUTIONS

- LIST OF COMMON REFERENCE IEC STANDARDS GIVEN TO MEMBERS TO START LOCAL STANDARDS REFERENCE LIBRARY AS PART OF IEC AFFILIATE PROGRAMME FOR DEVELOPING COUNTRIES

- AGREEMENT WITH STANSA TO ALLOW CONTROLLED ELECTRONIC ACCESS TO NRS SPECIFICATIONS WITHOUT CHARGE TO PIESA MEMBERS
5. UNDERSTANDING OF THE STANDARDIZATION PROCESS AND STANDARDIZATION IN GENERAL

SOLUTION

- TRAINING COURSE IN STANDARDIZATION.
- SO FAR TWO TRAINING SESSIONS HAD BEEN CONDUCTED IN ZAMBIA AT KAFUE GORGE REGIONAL TRAINING CENTRE IN 2004 AND 2007
PIESA HARMONISATION WORK IN SOUTHERN AFRICA (TO INCLUDE NON PIESA MEMBERS)

- PIESA recognizes that in order to achieve widespread application of the standards that it has identified, there is
  - Need to establish mechanisms to achieve the acceptance and availability of these standards to all stakeholders in the wider electricity sector of the regions.

- Hence the harmonisation efforts in the Southern Africa Development Community (SADC)
HARMONISATION OF STANDARDS IN SADC
• PIESA AND SADCSTAN (STANDISATION WING OF SADC) ARE

• ENGANGED IN A PROCESSTHAT WOULD FACILITATE SOME OF THE PIESA STANDARDS TO BE ADOPTED AS HARMONISED STANDARDS IN THE SADC REGION

• DRAFT MEMORUNDUM OF UNDERSTANDING HAS BEEN DONE
HIGHLIGHTS OF STATEMENT OF COOPERATION ON HARMONISATION OF STANDARDS
PURPOSE AND APPLICATION OF THE COOPERATION

- TO RECORD AN UNDERSTANDING BETWEEN THE PARTIES ON THEIR WORKING RELATIONSHIP AND TECHNICAL COOPERATION SO AS TO ACHIEVE THE SCOPE.

- THE COOPERATION DOES NOT MAKE ANY LEGALLY BINDING OR OTHERWISE ENFORCEABLE COMMITMENTS ON BEHALF OF ANY OF THE PARTIES.
• SCOPE OF THE COOPERATION

• COVERS THE RELATIONSHIP BETWEEN

  • SADCSTAN AND PIESA ON MATTERS OF TECHNICAL COOPERATION ON HARMONIZATION OF PIESA STANDARDS AS REGIONAL STANDARDS.

  • IT IS A REVISION OF AN AGREEMENT PREVIOUSLY CONCLUDED IN 2004.
AREAS OF COOPERATION AND RESPONSIBILITY

- DEVELOPMENT OF STANDARDS

  - PIESA SECRETARIAT TO NOTIFY THE SADCSTAN SECRETARIAT OF ALL PROJECTS PIESA ULTIMATELY WISHES TO PROPOSE AS HARMONIZED REGIONAL STANDARDS THROUGH SADCSTAN, WITH THE REQUEST THAT THE PROJECTS BE RECORDED AS A PRELIMINARY WORK ITEMS (PWI),

  - AT THE TIME OF EACH NOTIFICATION PIESA WILL ALSO ADVISE SADCSTAN OF THE PLANNED DATE OF SUBMISSION OF EACH NEW WORK IN PROGRESS (NWIP).
FOR EACH PROJECT, THE PIESA SECRETARIAT WILL SUBMIT A NWIP, WITH EITHER

- AN INTERNATIONAL STANDARD ATTACHED FOR DIRECT ADOPTION, OR

- WITH A PROPOSED COMMITTEE DRAFT ATTACHED, WHICH COULD BE

  - AN EXISTING PIESA STANDARD,
  - A WORKING DRAFT OF A NEW OR REVISED PIESA STANDARD, OR
  - AN EXISTING OR DRAFT PUBLICATION OF ANOTHER STANDARDS DEVELOPMENT BODY.
WHERE THE PROJECT IS A PROPOSAL BY PIESA FOR THE DIRECT ADOPTION OF AN INTERNATIONAL STANDARD,

THE SADCSTAN PROCEDURES PROVIDE FOR A PROJECT TO COMMENCE AT STAGE 4 (DHS) WOULD BE EXPECTED TO APPLY.
WHERE A PROJECT IS NOT THE DIRECT ADOPTION OF AN INTERNATIONAL STANDARD, AND PIESA CAN VERIFY THAT AT LEAST FIVE (5) SADC COUNTRIES WERE REPRESENTED IN THE WORKING GROUP INVOLVED IN THE DELIBERATIONS LEADING TO THE COMMITTEE DRAFT THAT IS SUBMITTED WITH THE NWIP,

- THE PROJECT WILL BE CONSIDERED FOR ENTERING THE SADCSTAN PROCEDURE DIRECTLY AT STAGE 3, COMMITTEE STAGE.

- NOTWITHSTANDING, ANY SADCSTAN MEMBER, WHOSE COUNTRY DOES NOT HAVE A REPRESENTATIVE IN THE PIESA WG, WOULD HAVE THE RIGHT TO NOMINATE A REPRESENTATIVE TO BE INCLUDING AS A MEMBER OF THE PIESA WG FOR THE PERIOD OF THAT PROJECT.
RESPONSES TO COMMENTS SUBMITTED BY SADCSTAN MEMBERS THAT RESULT FROM THE CIRCULATION OF A COMMITTEE DRAFT WHICH WAS PROPOSED BY P IESA

- SHALL ONLY BE FORMULATED BY THE RELEVANT SADCSTAN TECHNICAL COMMITTEE (TC) SECRETARIAT AFTER CONSULTATION WITH THE PIESA WG CONCERNED.

- SIMILARLY, IF THERE ARE COMMENTS FROM SADCSTAN MEMBERS DURING THE SUBSEQUENT STAGES.

- IN REACHING AGREEMENT ON THE RESPONSES TO ANY COMMENTS, THE PRINCIPLE OF CONSENSUS SHALL APPLY IN ALL CASES.
IN THE CASE OF HARMONIZED TEXTS THAT RESULT FROM PROJECTS PROPOSED BY PIESA, THE SADCSTAN SECRETARIAT SHALL INFORM THE PIESA SECRETARIAT WHEN ANY REVIEW OR AMENDMENT OF SADCSTAN HARMONIZED TEXT IS TO BE UNDERTAKEN.

THE PIESA SECRETARIAT SHALL BE RESPONSIBLE FOR INFORMING ALL PIESA MEMBERS TO LIAISE WITH THEIR RESPECTIVE SADCSTAN MEMBERS (NSB) TO ENSURE THEIR VIEWS ARE CONSIDERED IN THE NATIONAL RESPONSE.

THE PIESA SECRETARIAT, AFTER CONSULTATION WITH THE RELEVANT PIESA WG MAY SUBMIT COMMENTS AND OBSERVATIONS TO SADCSTAN TO ASSIST IN THE REVIEW PROCESS OR THE DEVELOPMENT OF AN AMENDMENT.
PUBLICATION AND COPYRIGHT OF HARMONIZED STANDARDS

- In the case where a standard that was already developed and published by PIESA is approved by SADCSTAN as harmonized text, PIESA shall grant SADCSTAN member bodies non-exclusive reproduction rights of the harmonized texts for adoption as their national standards.

- In the case of a proposed harmonized standard that is the text of a standard published by another standards development body, SADCSTAN shall be responsible for obtaining the permission of the copyright holder for the text to be published by its members.
IMPLEMENTATION AND STRUCTURES

• THE ABOVE AREAS OF COOPERATION SHALL BE IMPLEMENTED THROUGH THE FOLLOWING MECHANISMS:

  • INTEGRATION OF PIESA STANDARDIZATION PROJECTS INTO THE SADCSTAN PROCEDURES

  • INVITATIONS TO ATTEND THE OTHER PARTY’S ANNUAL GENERAL MEETINGS, AND ANY OTHER FORUMS ORGANIZED BY SADCSTAN OR PIESA AS MUTUALLY AGREED FROM TIME TO TIME.
COMMENCEMENT, TERMINATION AND PERIOD OF OPERATION

- THE COOPERATION WILL COMMENCE ON THE DATE OF ITS SIGNING BY THEIR RESPECTIVE CHAIRS AND WILL REMAIN IN EFFECT FOR AN INITIAL PERIOD OF THREE YEARS.

- THEREAFTER THE AGREEMENT SHALL BE AUTOMATICALLY RENEWED FOR SUCCESSIVE PERIODS OF ONE YEAR, UNLESS TERMINATED OR AMENDED.

- ANY OF THE PARTIES MAY, UPON GIVING THREE (3) CALENDAR MONTHS’ NOTICE IN WRITING OF ITS INTENTION TO DO SO, TERMINATE THIS COOPERATION.

- THE COOPERATION MAY BE AMENDED IF MUTUALLY AGREED UPON.

- ANY DISPUTE ARISING OUT OF THE INTERPRETATION OR IMPLEMENTATION OF THIS MEMORANDUM WILL BE SETTLED AMICABLY BY CONSULTATION BETWEEN THE PARTIES.
POSSIBLE CONTRIBUTION TO AFSEC

- PIESA STANDARDS ARE ALREADY ACCEPTED IN THE PIESA MEMBER UTILITIES WHO ARE DRAWN FROM BOTH EASTERN AND SOUTHERN AFRICAN REGION

- SOME OF THESE STANDARDS WILL BECOME HARMONISED REGIONAL STANDARDS IN THE SADC REGION

- THROUGH THIS HARMONISATION PROCESS PIESA STANDARDS COULD BE MADE AVAILABLE TO AFSEC FOR HARMONISATION THROUGH AN AGREED PROCESS WHICH COULD DISCUSSED
CONCLUSION

- PIESA HAS MADE A LOT OF PROGRESS IN THE HARMONISATION OF STANDARDS AMONG ITS MEMBERS

- PIESA NOW SEEKS TO FLOAT ITS STANDARDS FOR POSSIBLE ADOPTION AS SADC HARMONISED STANDARDS

- A MEMORUNDUM OF UNDERSTANDING FOR THE IMPLEMENTATION OF THIS PROCESS IS UNDERWAY

- THIS COULD ALSO PAVE WAY FOR PIESA STANDARDS TO BE CONSIDERED FOR HARMONISATION AT AFSEC LEVEL.
END OF PRESENTATION