

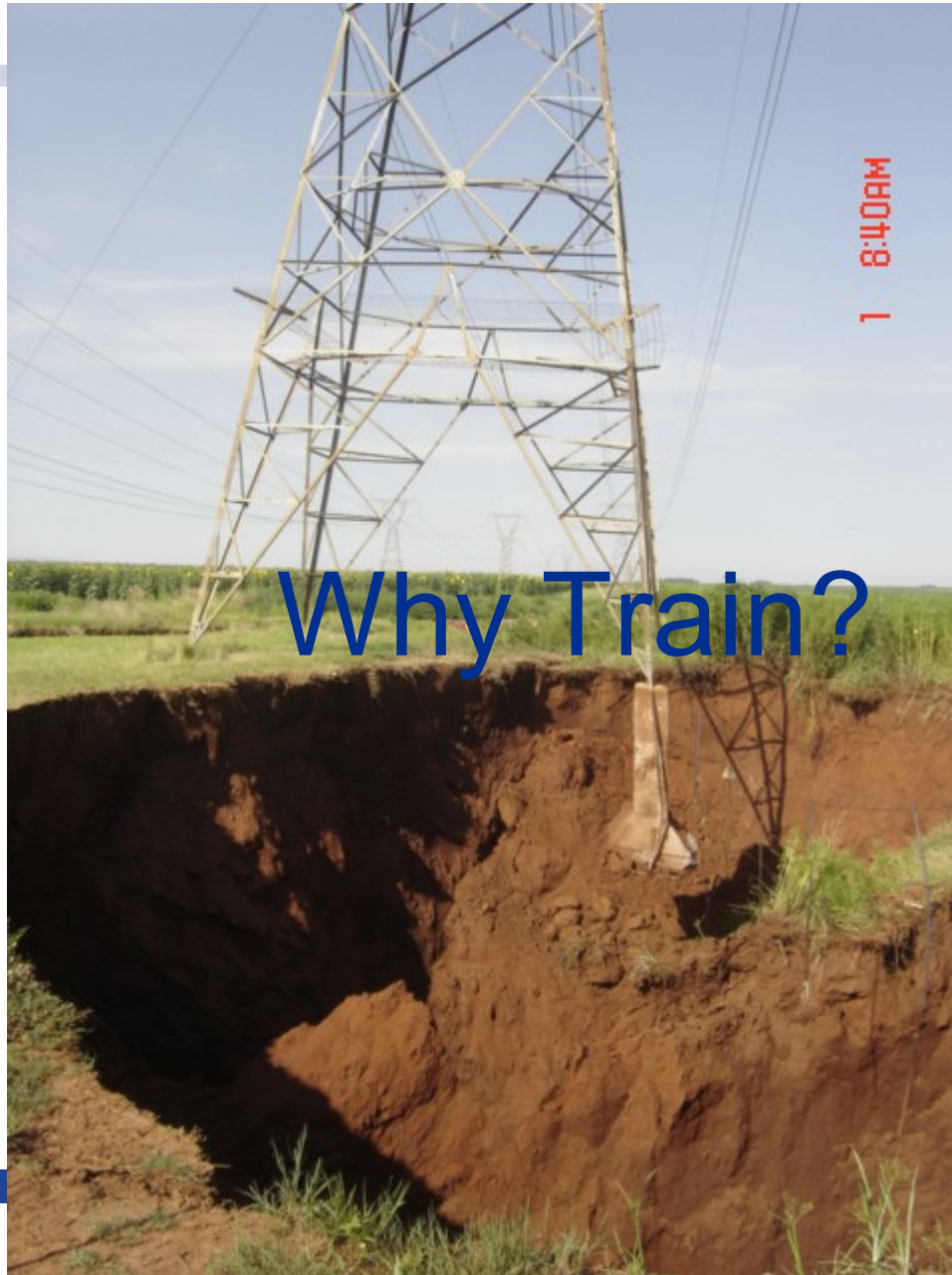
61st AMEU Convention

Skills Development for Network Planners in Eskom's Distribution Business

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Why Train?

Dx Network Planning Training

- Current Distribution Skills base is strained due to high staff turnover
- Network planners have become scarce, critical and core to the industry and flow through the internal resource market in Eskom as well as external market
- New staff require continuous training to ensure effective job outputs
- This places high demand on SME, time to train, cost to train and availability of training

Dx Network Planning Training

- The current training program for the Dx Network Planners is fragmented
- On job training forms the bulk of the current approach and stresses the existing subject matter experts
- A mandate has been received by the TESCOOD Planning Study Committee to introduce a sustainable training program within Network Planning with a possible extension to the rest of Network Services in Eskom Distribution

Training Framework

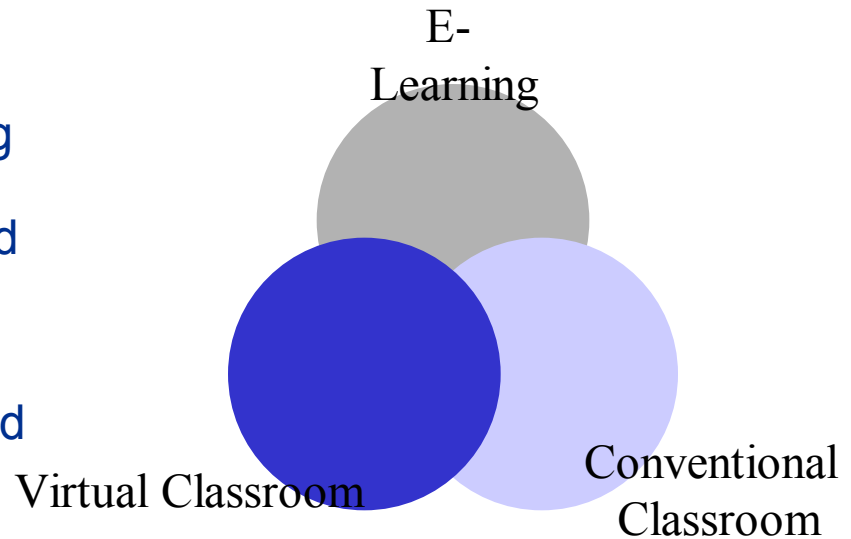
- A training framework for the development of a training program has been developed and supported by the Planning Study Committee (PSC)
- The framework identifies 12 major learning areas that are largely covered in the workgroups under the PSC.
- This translates into the development of 20 modules of training courses that make up the training program

My Learning – Process

- The My-Learning method requires the Analysis, Design, Development, Implementation and Evaluation (ADDIE - Model) for the content conversion.
- This process takes approximately six-eight months depending on the complexity of the material and the engagement of the subject matter experts.

My Learning – 3 Tier Model

- Expected benefits of this model (reduced classroom training, monitoring of progress, lower cost due to reduced associated training cost)
- Intrinsic benefits: improved network planning with benefits such as optimal expenditure, appropriate capex solutions, quality load forecasting, improved customer satisfaction
- Formal implementation of PDPs
- Formal and accredited training program



My Learning - Surveys

- The aim is to conduct a pre and post surveys of the skill levels of the planners that are on the program – this will be mostly based on perception as we are not gear to measure the learners knowledge such as a University or Technicon
- The pre and post surveys will be done on the principles of a 360° peer evaluation
- If such benefits of this e-Learning proves to be effective, then this model of training can be implemented in other sections of Network Services and the Engineering Division

Training Courses

- Development of training content for each of the following Planning courses are in progress to be completed:
 - Network Master Planning
 - Reliability for Network Planning
 - MV Cables for Network Planners
 - Introduction to Power Quality
 - Dx Planning Standard
 - Geo Based Load Forecasting
 - Lines and Cables for Network Planners
 - Transformers for Network Planners
 - MV Shunt Capacitors
 - Step Voltage Regulators

Future,... Consolidate basics

- 12 Major Learning Areas
 - Basic Principles
 - Transformers
 - Load Forecasting
 - Distributed Gx
 - Power Quality
 - Electricity Economics
 - Substations & Lines
 - Cables
 - Planning
 - Protection
 - Power Systems
 - Reliability

Resources

- Sanjian Malapermal
- Workgroup leaders and work groups
 - Clinton Carter-Brown, Ed Bunge, Malcolm Van Harte, Robert Koch, Gerhard Botha, Simphiwe Hashe, Faans Van Zyl, Ahilan Kailasanathan, Riaan Smit, Mobolaji Bello, Mike Pallet
 - External Resources - SME
- Eskom Learning Institute
 - External Resources – Analyst, Instructional Designers, content developers, e-Facilitators, project managers

External Pilot

- Plans are in place to pilot the network master planning course with members of the AMEU
- This can be extended to the wider Electricity Distribution Industry

Quick Start Guide

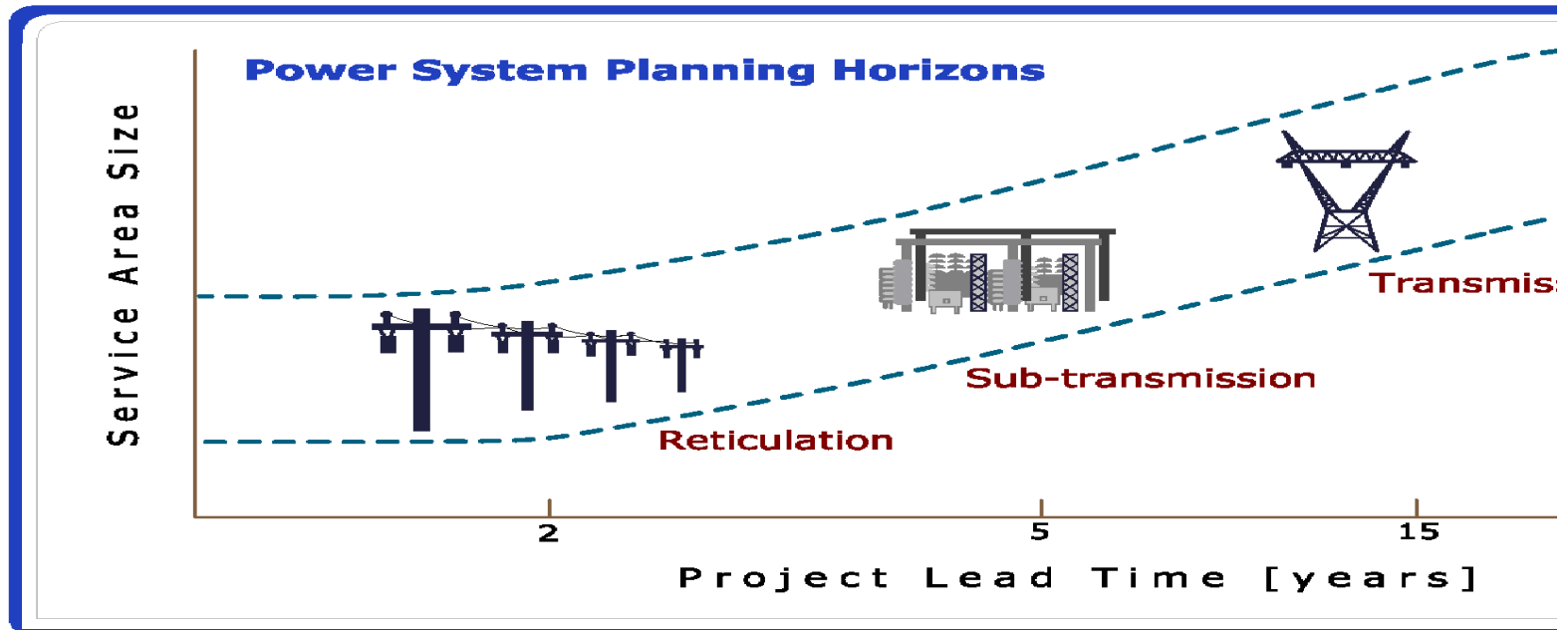


Network Master Planning Reports



Individual Tracking Reports

Quick Demo



Thank you

“You must be the change you want to see in the world”

Mohandas Karamchand Gandhi