



Electricity Distribution Developments in Namibia

Mr. Francois Robinson, Manager Regulatory Support Services, Electricity Control Board (ECB), Namibia

Presentation Outline

- Policy Framework
- Background – White Paper on Energy Policy
- ESI restructuring Objectives
- Government Policy directive on REDS
- Restructuring Process
- ESI Restructuring Recommendations
- EDI Development Strategies
- EDI Progress
- EDI Statistics
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Policy Framework



- The White Paper on Energy Policy, 1998
- ESI Restructuring Study, 2000
- Rural Electricity Distribution Master Plan
- National Tariff Study, 2002
- Single Buyer Market Design, 2002
- Electricity Act, 2007

White paper on energy policy 1998



- Process started early in 1997
- Approved by Parliament in 1998 as a policy framework for Energy Sector Development
- Goals:
 - increase efficiency
 - improve access to electricity
 - increase security of supply
 - promote investment & growth
 - ensure sustainability
 - alleviate resource constraints
 - appropriate governance

ESI Restructuring Objectives

- Efficiency gains
- Financial viability
- Rationalisation (address resource constraints)
- Improved customer service
- Promotion of electrification
- Create conducive conditions for private sector participation

GRN POLICY DIRECTIVES ON REDs



- ECB to manage the process on behalf of the Government
- REDs to be created as asset based and operational companies
- RED boundary to cover at least one political region
- REDs to be responsible for all licensed activities within their geographical boundaries (SLAs with private operators possible with ECB approval)
- No islands will be allowed within a RED area (no islands of prosperity within a sea of poverty)
- Private sector participation in REDs is encouraged, but not obligatory

Restructuring Process I

Cabinet mandated the Ministry of Mines and Energy 1997 to launch an in-depth investigation into the ESI and to make recommendations for future structures in line with the Energy Policy White Paper goals.

- Phase 1: Detailed investigation into ESI performance and international experience. Completed March 1998.
- Phase 2: Evaluation of restructuring options. Completed July 1998.
- Consultation Phase: Sharing of results & recommendations with Namibian stakeholders. Concluded April 1999.
- Phase 3: Detailed & focused investigation. Completed July 2000.

Restructuring Process II

- Cabinet Submission in November 2000 (approved)
- Inter-ministerial Committee created to guide the ESI restructuring process
 - Replaced by ESI Steering Committee after ESI Strategic Summit of 2003
- Regional & Local Authority Act amended
- MME outsource the restructuring process to ECB: 2004
- LA Surcharge methodology developed
- Electricity Act No4 2007 promulgated

Why the restructuring of ESI

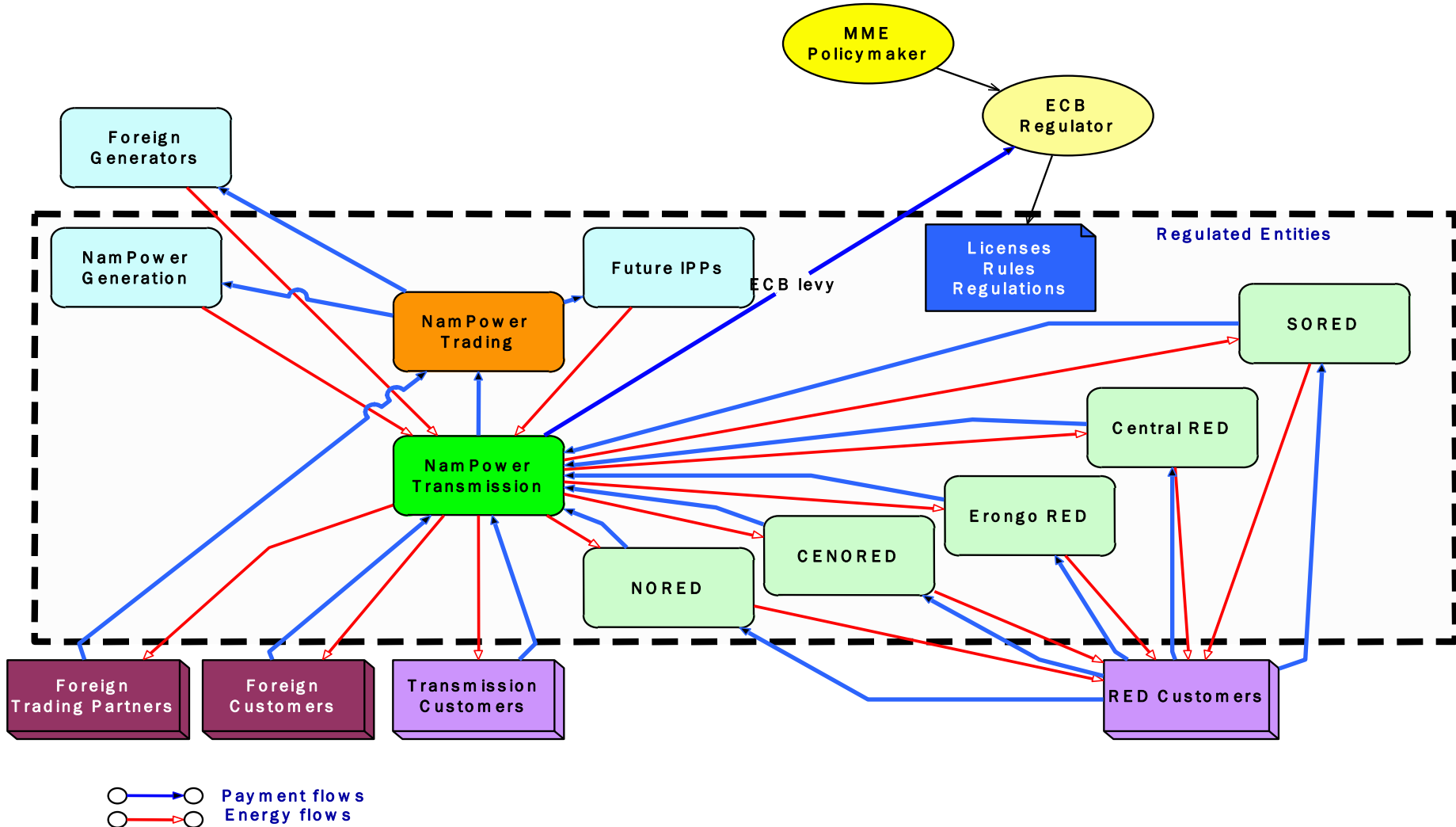
- Key deficiencies identified in the ESI system:
 - Fragmentation (too many players)
 - Lack of uniform tariff structure
 - Insufficient customer focus
 - Lack of human & financial resources
 - Diverse performance standards
 - Insufficient national & regional electrification planning
 - Low electricity accessibility ratio

ESI Restructuring Recommendations



- Establish a Single Buyer Market Structure, as a first step towards the liberalisation of the ESI
- Implement Regional Electricity Distributors (REDs)
- Review and implement key policy issues pertaining to the ESI
- Amend the regulatory framework to accommodate the requirements of the new ESI structure

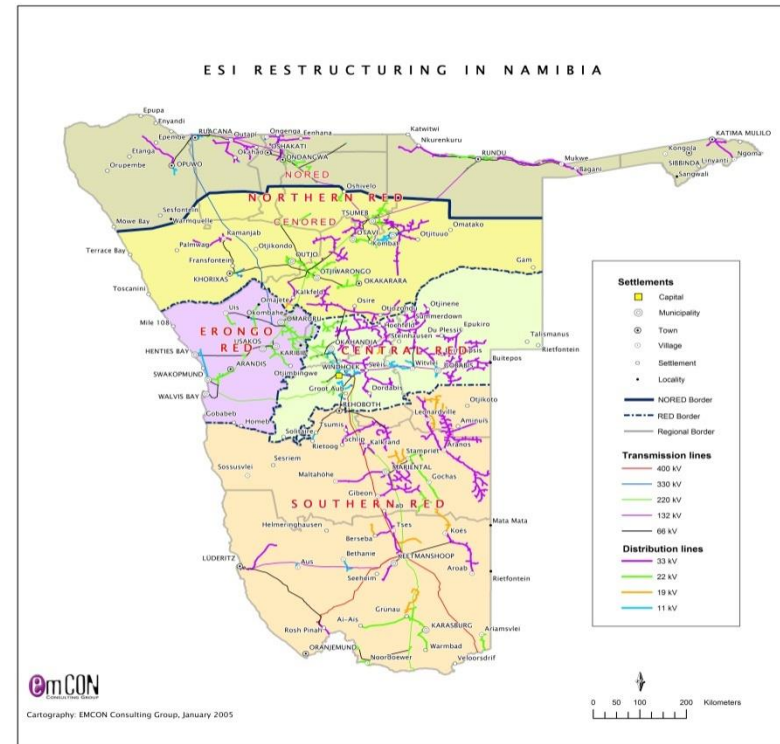
Envisaged Namibian ESI Structure



DISTRIBUTION & REDS



- Geographical areas conform to physical electrical system
 - A few large centres in each area
 - Large centres subsidise small centres
 - Rural development
- Financial modelling showed that each RED is commercially viable



Distribution - Strategies (1)



INCREASE SECTOR EFFICIENCY	Restructure into RED's. Effective regulation. Implement tariff study outcomes.
ATTAIN COST-REFLECTIVE BUT AFFORDABLE TARIFFS	Effective tariff regulation (cost-plus). Ring-fence distribution businesses. Gradual move to cost-reflectivity (2010). Allow internal subsidies (urban to rural, large to small, rich to poor) within RED's.
RATIONALIZING THE SECTOR	Restructure into RED's. Harmonize tariffs over time. Introduce & apply uniform standards.

Distribution - Strategies (2)



<p>IMPROVE ACCESS TO ELECTRICITY</p>	<p>More funds through concessionary loans. Update rural distribution master plan. Streamline master plan implementation through RED's.</p>
<p>ATTRACTING PRIVATE SECTOR INVESTMENTS</p>	<p>Weighted average cost of capital (WACC) as Rate of Return for RED's. Allow private shareholding in RED's. Special pricing arrangements for large industrial developments.</p>
<p>CAPACITY BUILDING</p>	<p>Market-related remuneration for RED employees. Training & Educational funds & programs.</p>

Distribution - Strategies (3)

<p>QUALITY OF SERVICE & SUPPLY</p>	<p>Develop Namibian Standards</p> <p>Implement penalty system: monitoring by & rewards to customers.</p> <p>Implement benchmarking system for continuous improvement.</p>
<p>CHANGE MANAGEMENT</p>	<p>Consultation with all stakeholders.</p> <p>Education of consumers and some stakeholders.</p> <p>Inclusion of change management programs in formation of RED's.</p>
<p>IMPROVED SECTOR GOVERNANCE</p>	<p>Amend & harmonize legislation.</p> <p>Cooperation with Government line Ministries.</p>



PROGRESS (1)

■ NORED:

- Operational since 2002
- Awarded a 25 years license
- OPE awarded permission to operate under the license of NORED
- Tariffs harmonized and cost reflective

■ CENORED:

- Operational since 2005
- Awarded a 25 years license
- Tariffs harmonized and cost reflective

■ ERONGO RED

- Operational since 2006
- Awarded a 25 years license.
- Tariffs harmonized and cost reflective

PROGRESS (2)



- SOUTHERN and CENTRAL RED:
 - Governance & ownership issues still under discussion
 - Slow progress for CRED creation of concern to GRN & ECB
 - High level political intervention required
- ESI Restructuring should be concluded in order to:
 - Expand and sustain an efficient and effective ESI
 - Achieve Vision 2030

Electricity Distribution Industry Statistics



- Dx Licenses Issued
 - 80 (2003)
 - 48 (2013)
- Dx Tariffs
 - <60c/kWh (2003)
 - 150c/kWh (2013)
- Capital Investments
 - <N\$50 Mil (2003)
 - >N\$600 Mil (2013)
- Access to electricity:
 - Overall 20-25% (2003)
 - Overall 35-40% (2013)
- No. Jobs (Directly)
 - <100 (2003)
 - >600 (2013)
- Electricity Losses
 - >30% (2003)
 - <15% (2013)

Main challenges

- **Alleviate electricity supply shortage:**
 - Successful IPPs (Large vs Small)
 - Successful DSM/EE measures (Incl. Smart Metering)
 - Develop integrated resource plan
- **Complete industry restructuring**
 - Operationalise 2 remaining REDs
 - Implement appropriate market
 - LA Surcharge Management
- Increase electricity access rates
- Design & implement poverty tariff system
- Bulk Upgrades
- Imports



END

Thank you