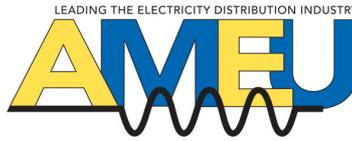


# Practical Perspective of the RED Business Model



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## Biography

Dr de Beer has extensive experience in the electricity distribution business; engineering and retail. His international exposure to the Electricity Distribution Industry, international benchmarking, best practices, mergers & acquisitions and extensive knowledge of the South African electric utility context have contributed to a very successful career in the electricity distribution business including the successful incorporation of the first two electricity utilities of former homelands, into South Africa. As Chief Operations Officer of EDI Holdings he is accountable for the programme management and readiness activities associated with the establishment of the future six Regional Electricity Distributors to be formed through a merge of 187 municipal electricity businesses and the Eskom Distribution business. He is a professional registered Certificated Electrical and Mechanical Engineer, and holds MBA and PhD degrees.

## Background

This paper presents a practical perspective of the future Regional Electricity Distributors (REDs) and a brief overview of the EDI restructuring progress to date. The electricity distribution industry (EDI) in South Africa which serves approximately 9 million end customers, employs 31 000 people and has an asset base of ZAR 260bn (2008 replacement value) is a more complex business than what is appreciated at times. The average age of the asset base is 45 years. While this industry is generating revenue, the sustainability of the industry is at significant risk and without a holistic and structured intervention the ability to render a reliable service to end customers and support economic growth required is at risk. The six future REDs will be established through the merge of the electricity distribution assets of the 187 municipalities licensed to distribute electricity and the Eskom distribution assets. The pockets of good performance are becoming less and should the restructuring process be further delayed the ability to recover in the medium term will be compromised.

## Introduction

Within the South African context, the challenges facing the EDI are well documented although not always appropriately appreciated. The current industry is amongst others grappling with an acute skills shortage, disparate tariffs, underinvestment in people and assets. Roughly one-third of the nearly 187 municipal electricity distributors are currently experiencing serious financial problems while Eskom Distribution is equally experiencing challenges regarding appropriate levels of maintenance, refurbishment and strengthening of key infrastructure. These challenges have manifested in distributors not being able to consistently provide adequate, reliable, and acceptable quality of electricity related services. The consequences of the under investment in the electricity distribution

assets and staff development are surfacing and are clearly demonstrated through an increase in outages and customers even demonstrating against unsatisfactory service delivery.

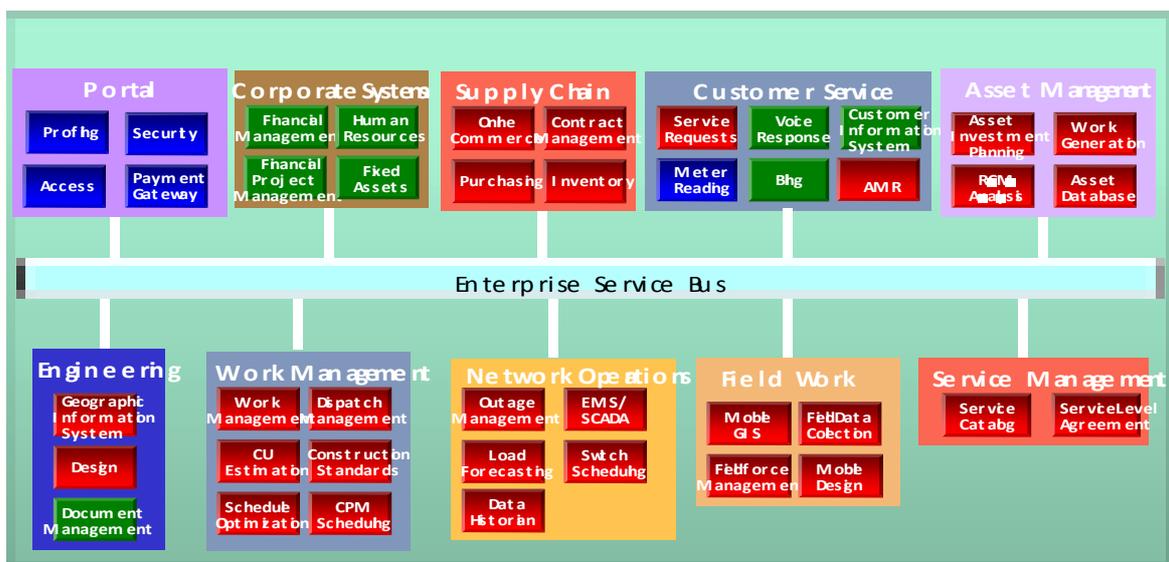
This introduction highlights some of the challenges which must be addressed through the establishment of the REDs. It is therefore essential that the future business model must leverage the current pockets of good performance, address the gaps and be flexible to accommodate the geographical diversity of the respective RED areas.

## Proposed RED Business Model

The electricity distribution industry is by its nature an asset intensive business. To ensure customer satisfaction and to grow the shareholder value, the RED business model must recognise the core functions of the business and effectively integrate the resources and business support enablers. The two core components of the future RED business model will consist of the Retail and Wires (engineering) divisions. These two divisions will be supported by a common support service function consisting of amongst others treasury, finance, human capital, corporate service, audit, compliance, legal, integrated enterprise wide risk management and an integrated business process and systems platform. The business will be a value chain driven organisation with a strong focus on adding value and measuring performance. While each RED will have a central point from where the business operation is directed, the regional presence will be enhanced through geographical deployment of resources as close as practically possible to the end customer.

The common support envisaged for the future REDs and the system support interface is illustrated in the diagram below:

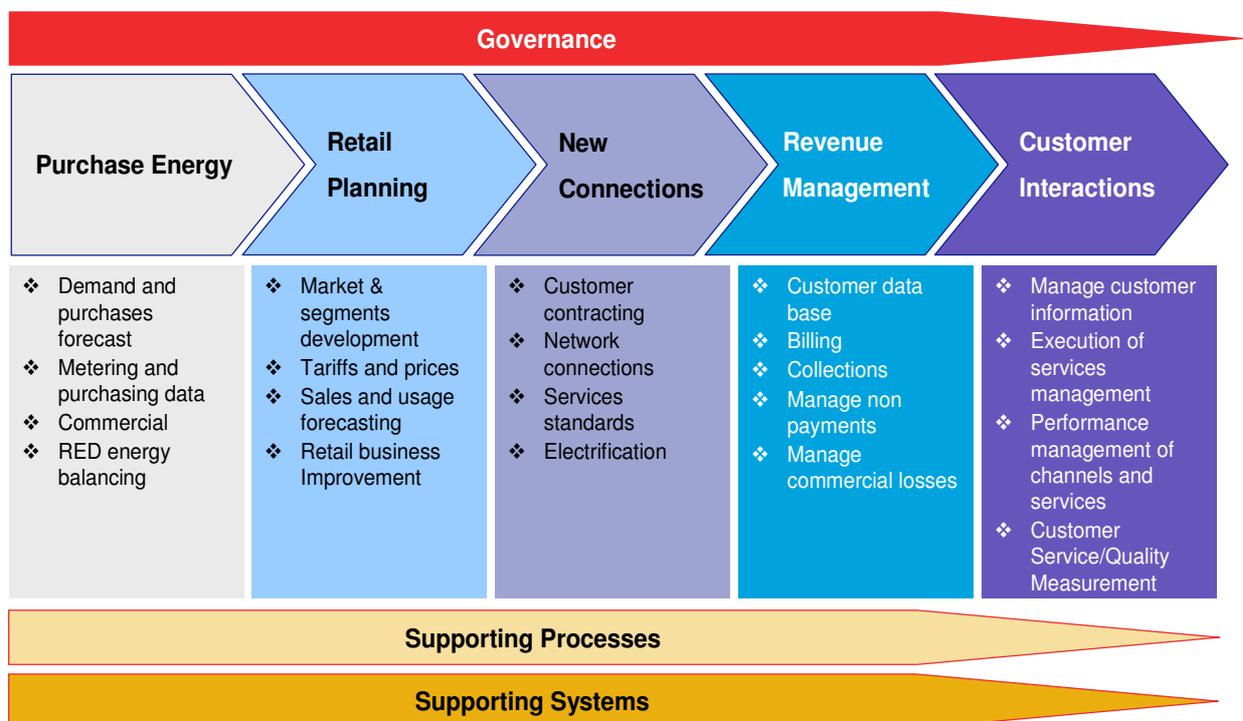
The proposed Utility solution map



## Retail

The Retail component of the business will include all the activities related to customer service, energy trading, forecasting, load research, contracting, tariffs, energy balancing, service levels, revenue management, risk management, acquire new customers and other related customer interfacing activities.. In many of the current municipal electricity businesses in South Africa the retail or customer related activities are performed through the Financial Departments of the municipalities. However, research of best practices has indicated that the functions described above are best executed through a dedicated Retail Division.

The diagram below provides an illustration of the value chains applicable to a classic Retail function within a modern electricity distribution business:

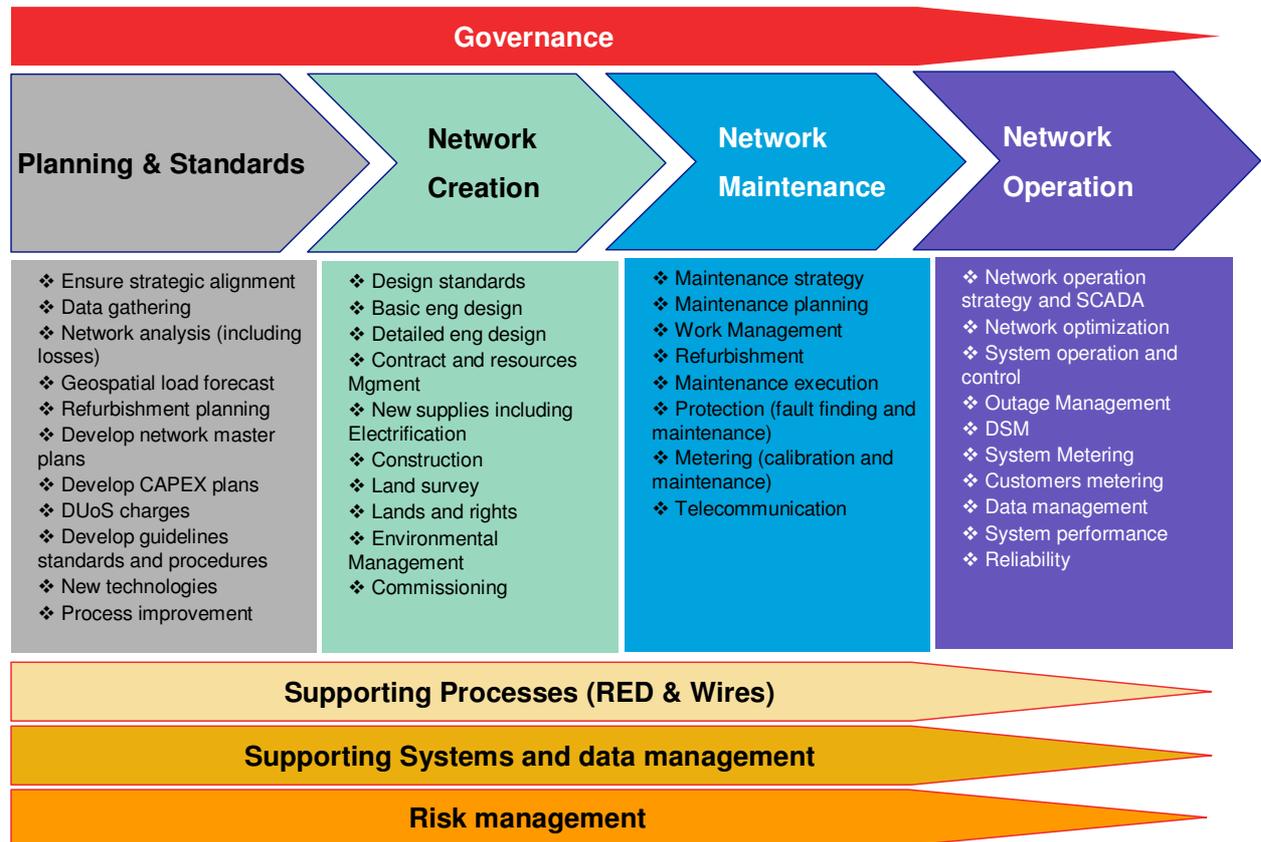


## Wires

The Wires (or engineering) component of the business is by its nature an asset centric, geographic monopoly, responsible for the safe distribution of electricity to the satisfaction of the customers. It is therefore essential that the wires business must be tightly regulated and subjected to well defined investment, performance and reliability standards. The application and introduction of appropriate technology will be leveraged in the future Wires business to ensure a well integrated business with good performing assets. Furthermore open and undiscriminated access must be provided to all customers, retailers, generators, co generators and renewable energy suppliers. Since the Wires business owns the networks and associated assets it is essential that a holistic asset management and investment plan is in place and efficiently executed. Availability and reliability of supply are but two of the critical performance areas from a wires/engineering perspective. All customers supplied off the distribution wires of the respective RED will contribute to the wires charges. The staff representing the Wires component of the business are normally the most visible and therefore are by default are mainly the business contact point for most of the customers and public at large. It is therefore

essential that this default interface must be factored in when stakeholder and communications strategies are developed and staff is recruited, trained and deployed.

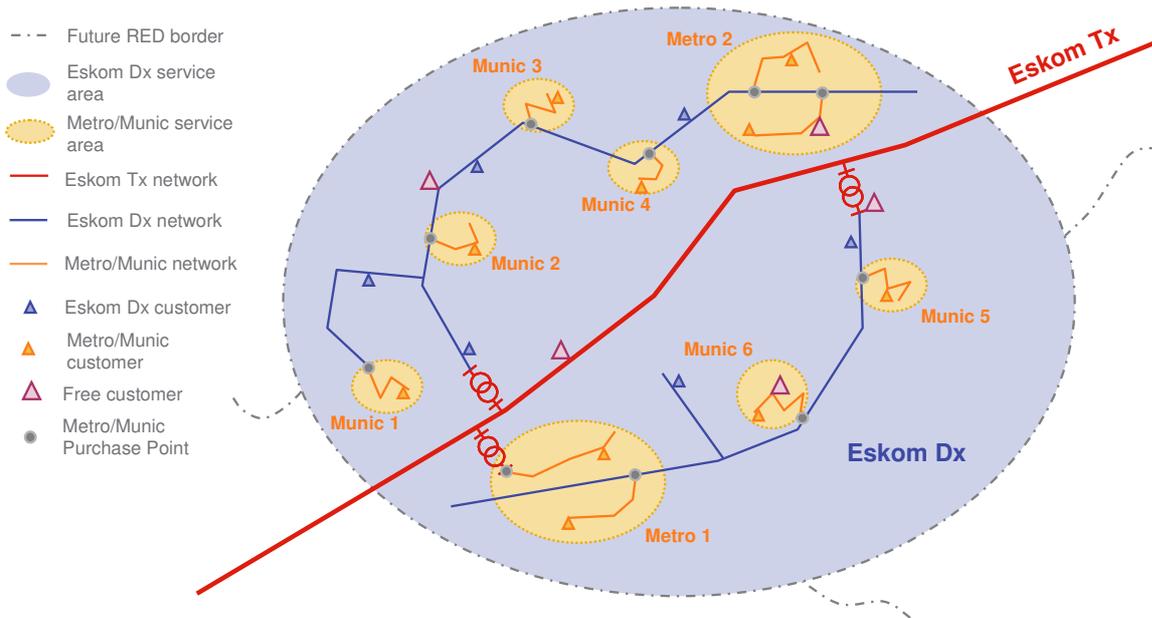
The diagram below provides an illustration of the value chain applicable to a classic Wires function within a modern electricity distribution business:



## Value Proposition

From the above it is clear that the business model envisaged for the future REDs will be in line with appropriate best practices and be different to the current business model deployed by most participants operating in the current EDI in South Africa. The proposed business model will allow for focused customer attention, clear accountabilities, good governance, optimal resource utilisation and effective asset management. Furthermore the model will facilitate business process consolidation and optimisation and cater for infrastructure and network reconfiguration which will lead to improved diversity and energy management. Ultimately the customers will benefit from improved reliability, savings through consolidation and a more predictable pricing signal.

The diagram below provides an illustration of the current network configuration which is a direct result of the current business model deployed. The opportunities for consolidation and leveraging of point of supply diversity can be seen in this illustration.



There is no doubt that competent people play a significant role in providing leadership and ensure the effective managing and operating of any business. The future REDs are therefore not excluded from this requirement and the selection of the future leadership will ultimately determine the extent of successful delivery in terms of the value proposition.

### Readiness Progress to Date

While discussions associated with the EDI restructuring has been ongoing for a good number of years, the RED establishment journey officially started in January 2004. The voluntary nature of the process and the absence of the required enabling legislation have significantly complicated this journey. Despite the challenges, good progress has been made since the establishment of EDI Holdings and the table below reflects some of the key milestones:

<p>Enabling Legislation</p>	<p>Significant progress by DoE in terms of the RED Establishment Bill and the framework was tabled at Cabinet on 16 April 2008.</p> <p>Asset Transfer Framework promulgated and National Treasury issued the final regulations in August 2008.</p> <p>On 07 September 2007 the Municipal Fiscal Power and Function (MFPF) Act was promulgated which covers the Surcharge principles which will be applicable to ensure a revenue flow to Local Authorities for services rendered within their area of jurisdiction.</p>
<p>Staff Transfer to the REDs</p>	<p>Establishment of the Transitional Labour Relations Structure (TLRS).</p> <p>Approval of the retention of the pension tax exemption which are applicable to specific municipal staff.</p> <p>Agreement at TLRS level on the following:</p>

	<ul style="list-style-type: none"> <li>• Regional Transitional Labour Relations Structure</li> <li>• Transfer of employees to the REDs</li> <li>• Placement and migration of employees within the REDs</li> </ul>
RED Establishment	<p>On 25 October 2006 Cabinet reconfirmed the restructuring of the EDI and the establishment of six wall to wall REDs as an end state model</p> <ul style="list-style-type: none"> <li>• Business model developed</li> <li>• Industry financial model developed</li> <li>• RED establishment framework developed</li> <li>• Detailed RED viability analyses completed</li> <li>• Proposed governance, compensation and asset valuation frameworks developed</li> <li>• DEAL issues identified</li> <li>• RED establishment governance structures rolled out</li> <li>• 147 of the 175 electricity distributing municipalities have signed the accession to the cooperative agreement</li> <li>• 11 municipalities are ringfenced</li> <li>• Eskom Distribution is 98% ringfenced</li> <li>• 56 municipalities in the process of being ringfenced</li> <li>• Business plan and strategy developed to address the distribution asset management turnaround.</li> </ul>

## The Journey Ahead

The restructuring journey will remain complex and will call for commitment and strong leadership. It is encouraging to witness the level of support from various key stakeholders and a demonstration of this is that 147 of the 175 electricity distributing municipalities have signed the accession to the cooperative agreement. Furthermore the electricity businesses of 11 municipalities are ringfenced while Eskom Distribution is 98% ringfenced.

The journey ahead is dependent on the RED Establishment Act and all indications are that this piece of legislation could be promulgated during 2010. In the interim EDI Holdings will continue to focus on the RED establishment readiness activities and the negotiations with the current asset owners to ensure a smooth transition from the current businesses to the REDs.

## Conclusion

It is essential that the RED establishment programme be accelerated in the interest of the customers, the economy and business stability. The restructuring can never take place at the cost of the current asset owners and therefore the transaction envisaged is designed to take into account the interest of the current asset owners, customers and the country at large. The environment is ready for the EDI restructuring and there is sufficient stakeholder support to move forward with the restructuring programme.

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