EDI Restructuring: The Legacy, the Lessons and the Future

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1. Introduction:

The journey to restructure and consolidate the electricity distribution industry (EDI) has been an arduous and challenging, yet exciting one. We did not travel the road alone, but had the fortune of the companionship of a myriad of stakeholders, for whose support and counsel we remain ever grateful.

Six months has passed since the official operational closure of EDI Holdings. A year has passed since it became obvious to all stakeholders that EDI Holdings life span was limited. Two years have passed since it became evident that any meaningful progress in restructuring the EDI was unlikely without a Constitutional change to facilitate movement. Eight years have passed since the establishment of EDI Holdings. And over twenty years have passed since the idea of restructuring the EDI was first raised and debated by industry stakeholders.

So what of the future of the EDI? Is all lost in terms of restructuring the industry? Has the considerable investment been wasted? Was the process doomed from the start? Has the closing of EDI Holdings resulted in the rationale for restructuring no longer being relevant? Are there still legitimate business operations drivers that highlight the imperative for action in the EDI?

2. A Brief History of the process leading to the halt in the EDI Restructuring process

The halt to the restructuring process and the associated closure of EDI Holdings can be summarised as follows:

On 18 November 2010, during the 6th Annual General Meeting of the company, the Honourable Minister Dipuo Peters, Minister of Energy, engaged with the EDI Holdings Board of Directors. During this meeting the Board indicated to the Minister that EDI Holdings had made significant progress in respect of the EDI restructuring preparation and readiness activities. The EDI restructuring programme consisted of 897 registered projects, inclusive of the projects dependant on external inputs. EDI Holdings had completed 72%[1] of the registered projects which confirms the significant progress towards the establishment of the envisaged REDs. Furthermore, the Board indicated to the Minister that without the necessary enabling legislation, it is not possible to deliver the Regional Electricity Distributors (REDs) as envisaged in the business plan of the company.

The Minister acknowledged the progress made by EDI Holdings and concurred with the Board that, amongst others, the accountability to drive the restructuring enabling legislation, resides with the Department of Energy (DoE). The Minister indicated to the Board that she was in consultation with her colleagues and some stakeholders on matters pertaining to the EDI restructuring, including the future of EDI Holdings. Furthermore the Minister informed the Board that it was her intention to make a submission to Cabinet, after these consultation processes that EDI Holdings should cease to operate/exist with effect from 31 March 2011.

On 08 December 2010, the Cabinet passed a resolution to close EDI Holdings on 31 March 2011 and to discontinue the process of creating the REDs. The media release[2] stated that: *"Cabinet decided to terminate the Electricity Distribution Industry (EDI) restructuring and to discontinue the process of creating the Regional Electricity Distribution (REDS) with immediate effect. Although the Electricity Distribution Industry Holdings (EDIH) had made significant progress in establishing the REDs, Cabinet approved the recommendation that the Department of Energy takes over the programmes previously executed under the EDIH mandate. The department will review the whole electricity value chain with a view to developing a holistic approach to revitalise electricity infrastructure, energy security as well as the financial implications. An administrator will be appointed to attend to the winding up of EDIH. The EDIH Board will remain accountable until the end of the 2010/11 financial*

[1] Source: 2011 EDI Holdings: Operations Division Close Out Report

[2] Source:2010 December 09: GCIS Press Release

year". The programmes and associated responsibilities of EDI Holdings would therefore transfer to DoE as from 01 April 2011.

3. The Legacy

Since the inception of EDI Holdings, the company worked hard at realising the key objectives of the EDI Restructuring and to provide momentum in respect of the Cabinet resolutions pertaining to the EDI reform. To this end significant industry value was delivered in terms of project development and delivery, but perhaps more importantly, unbiased industry analysis and research were performed that revealed a far more comprehensive picture of the state of the EDI than had ever been available. Many of the assumptions were proved, some perceptions changed and many new and disturbing facts emerged that pointed to the need to accelerate the restructuring process. However, these interventions also contributed to a better understanding of the challenges faced by the EDI which in turn directly contributed to a greater willingness to address, amongst others, the funding and resources challenges. Today the industry has a comprehensive data set available and the foundation is laid for the industry leadership, policymakers and the regulator to guide the required EDI reform. Furthermore the leading practices were identified, and through the benchmarking conference which took place on 23 and 24 February 2011, communicated to the key stakeholders. Furthermore, the trend analysis assists in defining the realistic performance targets for the various entities. During the conference it was also demonstrated how utilities, policy makers and regulators could use the benchmarking results to enhance amongst others tariff design, tariff approval, funding allocation, asset management, etc.

The EDI Restructuring journey deliverables can broadly be categorised into six areas. These areas are:

- Industry Modelling;
    - Governance
- Operating Model;
    - Revenue
    - Business viability
    - Shareholding
    - Compensation
    - Valuation, etc.
- Legislative, Policy and Governance;
- Human Capital;
- Stakeholder and Communication Management;
- Restructuring and Operational Readiness;
    - Asset Management.

The "baton" is available and the "champion" who can able take that "baton" and lead the EDI optimisation process must now be confirmed.

4. The Lessons

The governance arrangements which were established to facilitate the RED establishment readiness activities, in general, worked well. The level of seniority and commitment to the restructuring process of the nominated people, who participated in the governance structures, had a direct impact on the success of the relevant institution.

The level of commitment of the participants at the Sponsors Committee level filtered through the total governance structure and even impacted on activities at the work group level. However the ambivalent commitment of some of the participants at some of the Sponsors Committees filtered through the total governance structure and even impacted on activities at the work group level. Personal agendas at times generated unnecessary work and restricted the readiness progress.

While EDI Holdings made significant contributions in respect of the required enabling legislation to facilitate the establishment of the REDs, the process did not progress at the desired speed. The absence of the relevant required enabling legislation is fundamentally the root cause for the delay in the RED establishment. Furthermore, from a policy perspective the required initiative to create the necessary policy environment which could entrench the RED establishment was not evident. Amongst others, the regulatory competency was not leveraged from a policy perspective to assist with the EDI reform. The absence of decisive regulation and enforcement of compliance by NERSA, did not assist the EDI reform process. The over reliance on a legislative solution to assist in the creation of the REDs, was a strategy which did not yield any results and ultimately failed the process. Overall visible sponsorship of the EDI restructuring programme and clear accountability for the success of the EDI restructuring was also lacking.

In summary the following key lessons are applicable to the EDI reform journey:

- The restructuring of the EDI is a complex process;
- The current EDI is deteriorating at a rapid rate and service delivery is going to become an even bigger challenge going forward;
- The participation of the stronger entities in the current EDI is key to the ability to lay a sound foundation for any restructuring process;
- The restructuring cannot take place without the willing asset contribution of the current asset owners;
- Any delay in the restructuring process has a direct impact on the morale of the people in the industry and in particular, leads to the development of other strategies which are not always in support of the long term vision for the ED;I
- Enabling legislation is critical to the EDI restructuring success;
- Visible and committed strategic leadership/sponsorship is critical.

5. The National Perspective

The South African electricity distribution industry remains highly fragmented with electricity service being provided to customers by Eskom and approximately one hundred and seventy-five (175)[3] re-distributing municipalities. Despite pockets of good performance, the current industry model is inefficient and is not optimally serving the best interest of the country, the economy and customers at large. Furthermore the industry is faced with significant financial and human resource skills shortages in addition to, amongst others, price inequality, inconsistent service to customers and a significant maintenance, refurbishment and infrastructure strengthening backlog. As at 31 March 2011, Eskom and a total of 154 out of the 175 municipalities, licensed to distribute electricity had signed the Accession to the Co-operative Agreement, which was always regarded as the in principle agreement to participate towards the reform of the EDI. With the closing down of EDI Holdings and the relevant projects being transferred to DoE, it is now essential that a "champion" be identified to direct the EDI in respect of the way forward.

Globally there are significant similarities in the electrical systems, from a physical and operational perspective. Furthermore, restructuring of the electricity supply industry (ESI), inclusive of the EDI is a worldwide phenomenon and the reform requirement is not unique to South Africa. The restructuring in the worldwide context, amongst others, is driven by efficiency improvement potential, business sustainability, business synergies, to attract private investment, energy security considerations etc. The industry reform is therefore not just a "nice to have" but a business sustainability imperative. Countries such as Australia, New Zealand, the United Kingdom, United States of America, Switzerland and Germany, are regarded as the leaders in the electricity industry reform. A significant observation is that the reform process in all of these countries took between 10 and 15 years to complete. These countries conducted the reform process in a legally enabled environment which is perhaps the fundamental difference between the approach adopted internationally and the approach adopted in South Africa. Furthermore the political will and asset owner co-operation was in place to support the reform process and endure such a long journey.

In meeting the government's vision of providing South Africans with affordable, reliable and sustainable electricity, the government called for the Electricity Distribution Industry (EDI) to be consolidated, with Eskom distribution and various municipal electricity utilities being amalgamated into Regional Electricity Distributors (REDs). In 2003, EDI Holdings was consequently established and mandated to lead a restructuring process of the industry towards the six wall-to-wall RED end-state. An initial pilot implementation (RED 1) was attempted in Cape Town in 2005. Though the concept was sound, RED 1 could not continue to operate mainly due to the absence of legislation to facilitate the transfer of assets from the City of Cape Town to RED 1. However, lessons have been learnt, especially around the immense difficulty of restructuring with optional participation, the absence of enabling legislation and without a phased implementation approach.

[3] The original 187 electricity distributing municipalities decreased to 175 through supply area amalgamation.

The Constitution (section 156) presently grants municipalities' executive authority over, and the right to administer, electricity reticulation. As a result, it is not possible for national government to put in place governance, regulatory and investment framework for the entire electricity supply industry. Furthermore in the light of the provisions of the Constitution and other legislation, such as the Local Government: Municipal Systems Act 32 of 2000, Local Government: Municipal Finance Management Act 56 of 2003, the national government could not have implemented the EDI Restructuring programme without amending the existing legislation, including the Constitution.

After extensive research and legal advice, a considered conclusion was reached that the most effective and efficient way to implement the EDI restructuring and achieve government's objectives was by amending the Constitution so as to pave the way for the enactment of the RED Establishment legislation. Therefore the proposed 17th Constitutional Amendment Bill which was introduced in Parliament on 13 August 2009, sought to empower national government to regulate by legislation the executive authority of municipalities in order to, inter alia, achieve regional efficiencies and economies of scale in respect of a particular municipal function. However, early in 2011 the 17th Constitutional Amendment Bill was withdrawn from the Parliamentary process.

In recent years, some of the electricity distributing municipalities and some Eskom regions have experienced increased technical problems and power outages due to failures in existing distribution infrastructure and networks, rather than a failure in the generation supply. The National Energy Regulator of South Africa (NERSA) recommended that when municipalities determine their electricity tariffs for 2008/09, the revenue requirement should be inclusive of a five (5) percent provision for maintenance, refurbishment and recapitalisation and a seven (7) percent provision towards capital investment. Despite this requirement, EDI Holdings demonstrated through the ringfencing project, that in most cases these investment guidelines are not adhered to. Of importance is to note that these guidelines assume an asset base which is well maintained and that there is no capital investment backlog.

Initially, the estimated cost of restructuring the electricity distribution industry was estimated at R2.5 billion (2003). The basic view was that the industry should fund this reform initiative such as the RED readiness activities and that there will not be financial support from the national fiscus. Very early in the restructuring journey it became clear that the industry was not going to fund the required readiness activities from their existing reserves or current revenue streams and neither was the staff secondment concept going to materialise.

During the 2006 consideration of the Multi Year Pricing Determination (MYPD) funding allocation, NERSA decided to limit the funding allocation for the EDI restructuring through the MYPD (2006 to 2009) to R1.2 billion of the R2.5 billion required. EDI Holdings however did not receive the envisaged R1.2 billion during the 2006/2009 MYPD period. While the restructuring programme was now under tremendous pressure due to inadequate funding, the Medium Term Expenditure Framework (MTEF) Budget Guideline Allocation from the Department of Energy (DoE) was also drastically reduced to levels inadequate to financially support the EDI Holdings corporate functions going forward. Due to the deteriorating funding situation and the constantly changing environment, EDI Holdings had to review its strategic plan, adapt and change the roadmap, milestones, timelines and deliverables on a regular basis.

EDI Holdings realised that it was now virtually impossible to complete the EDI Restructuring programme with the MTEF allocation having been cut so drastically as well as the limitation in respect of the project funding. The restructuring journey could hardly be completed within the budget available without passing some of the projects to the REDs for completion, thereby affecting their viability. The funding allocation was now also in direct conflict with the communication received from the Honourable Minister of Energy in respect of her commitment to the restructuring journey, and assurance given in 2009 that the process will continue, at least until the REDs are established. Since inception, EDI Holdings invested R951 million in the restructuring journey. The largest percentage of this investment was towards RED establishment readiness related activities.

The EDI is, by its nature, an asset centric business with a replacement asset value, estimated at R260bn (2008 values). While pockets of excellence in the current EDI are recognised, the viability of the industry is under risk, amongst others, due to the underinvestment in infrastructure by most of the current asset owners. Through a study, conducted by EDI Holdings during 2008, it was revealed that the estimated maintenance, refurbishment and strengthening backlog in the distribution network was calculated at R27,4bn (2008 values). This backlog is growing at an alarming rate estimated at R2.5bn per annum. Despite the pockets of good performance, the 2007 NERSA report on the state of EDI infrastructure also demonstrated that the assets need urgent rehabilitation and investment. Since the report was issued, very little has been done to improve the infrastructure and this situation is confirmed through the latest reports available. Unless an immediate and direct intervention is initiated it will be very difficult to recover the industry from its downward trajectory. Such a development would have grave implications for the economic growth trajectory the country has set itself, given the role of electricity as an economic enabler.

While there might be agreement at a political level that the EDI reform process should be delayed, the challenges facing the EDI have not disappeared and neither will they disappear without a well coordinated and structured national intervention. Without substantial financial investment, sustained over at least a 10 year period, there is a real risk that distribution infrastructure related power failures will escalate. The level of envisaged distribution infrastructure related power failures might in the very near future be at a level equivalent or worse than the outages experienced during the 2008 generation related load shedding challenges.

6. The Regional Operational Perspective

The macro policy environment and approach adopted by key stakeholders at a national level has determined both the nature and pace of reform in the industry. Given the fragmented nature of the industry, consisting of a limited number of larger licensed entities and many small entities, the majority of the current license holders are struggling to keep the lights on in a politicised policy and compliance environment. The bigger entities, such as Eskom Distribution, the Metropolitan Municipalities and some secondary municipalities have actively participated in the restructuring process, and have, to a greater or lesser extent, managed to influence the process to align with outcomes that best meet their individual needs.

The one hundred and fifty or so remaining license holders are all smaller municipalities. These municipalities are far from a homogenous group; given a vast range in size of their electrical distribution operations, they are geographically dispersed across the country and are subject to varying political governance arrangements. In many respects, this is the group that has been without a real voice in the restructuring process; and herein lies the dichotomy. Much of the rationale for restructuring was based on creating a balance and equality in the industry, in the best interests of the end user of electricity. However, the entities that stood to benefit most from the restructuring were the ones without a voice in determining the outcome.

While one must acknowledge that the political and electricity operations view in municipalities do not always align, many of the smaller municipalities have regularly expressed the need for a restructured industry that frees the small municipality from the burden of electricity service provision whilst, retaining some revenue stream from the provision of this service. The outcomes of the EDI Holdings ringfencing process revealed in some instances, just how tenuous the profits were from the provision of the electricity service, and in some instances, that entities are making a loss. Whilst one can argue that the implementation of effective and efficient management practice would result in a profit making scenario for virtually all license holders, this is not a readily achievable goal. The reality is that for many of the small entities, the implementation of resources, systems, processes and infrastructure required to create long term sustainability are simply not achievable, particularly since most of these entities operate in a less than supportive and enabling governance environment. This is not to say that the employees of these small entities are not trying to get the job done. While horror stories abound, many of the true heroes in the EDI are to be found in the small municipalities' electricity departments. In some instances, it is incredible to see what is accomplished given the myriad of constraints, ranging from obscure and onerous council processes and complex regulatory compliance requirements to a lack of funding, resources and skills.

Despite acknowledging the tremendous effort made by individuals in the industry to keep the lights on, adopting a holding pattern will result in industry deterioration. Here again, the smaller entities are at bigger risk. The loss of one or two key resources can result in the collapse of service provision. In the bigger entities, it is perhaps easier to paper over the cracks, but the fundamental challenges remain. The bigger the operation, the longer and more challenging the process to recover from a catastrophic event.

7. The Current Status

What has happened since the closure of EDI Holdings? In many respects it appears to be business as usual for the electricity distribution industry. The lights are still on, the duration and frequency of outages appear to be tolerated by customers, there has been no major meltdown and the overriding perception is that generation still appears to be the major risk to be addressed in the electricity value chain. So it could be argued, just maybe, the industry was not quite in the state of risk that led to the EDI restructuring mandate and the establishment of EDI Holdings. However, the fundamental business risks remain and the danger of a calamitous incident/s is six months closer. If nothing is done, it will happen at some point in the future.

It is also true that not all Distributors have carried on with business as usual. There are a number of municipalities who are leveraging amongst others the ringfencing work which was conducted to improve their business efficiency. Furthermore a number of the entities are using the information which became available through the industry benchmarking exercise to enhance their efficiency. Eskom has also embarked on a national programme to restructure the total Eskom Holdings business, with significant changes being proposed for the Distribution business sector.

The Eskom Distribution business is being geographically reconfigured to align with the nine Provinces and General Managers have been appointed to Head up these Provincial Units.
A new Operating Model is being developed within general design principles of:

- Operating units with tight focus on delivery
- Professional centres of excellence & shared services
- Faster and more transparent decision making
- New units to enable full implementation of strategy

Key aspects of the new Distribution Operating Model are reflected in the diagram below and are encapsulated in the Distribution mandate.

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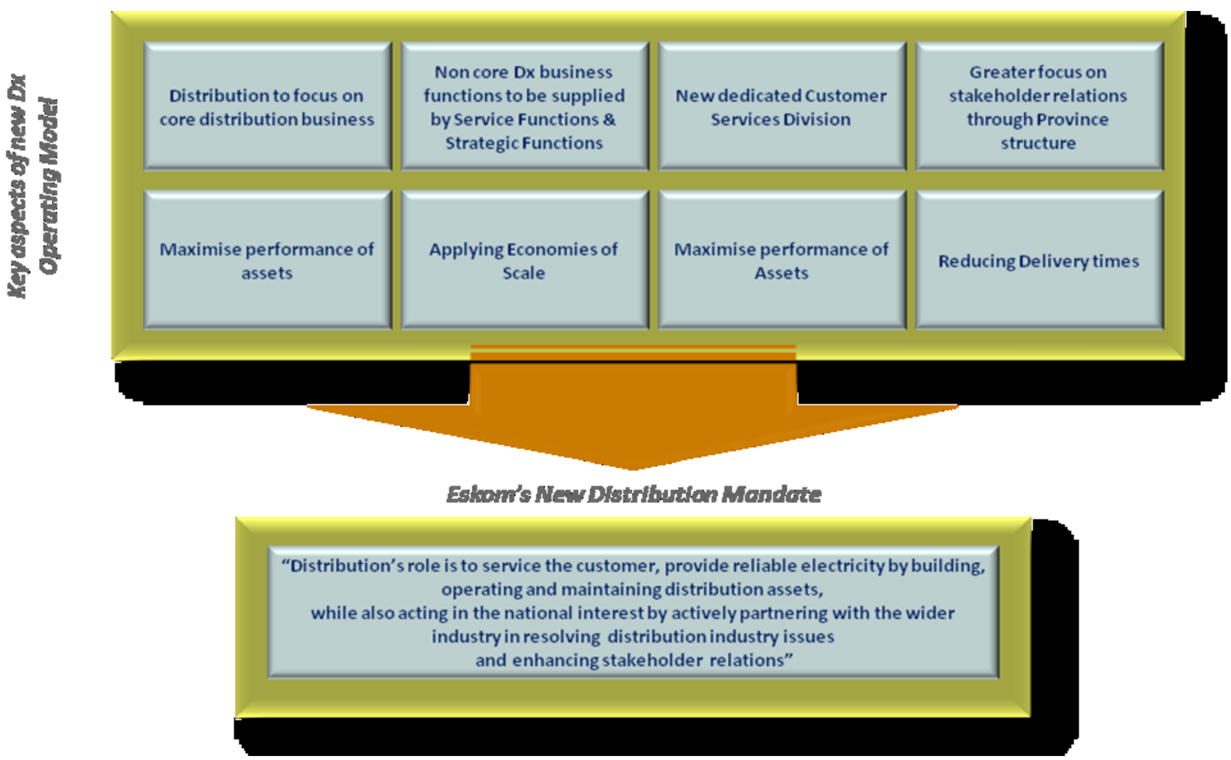

Of particular interest to this audience is the stated Eskom intent of active partnering with the wider industry to resolve industry issues. The need to position Eskom to support the municipal environment in the national and security of supply interest is recognized and acknowledged within Eskom, and strategies are being developed to support this aspect of the Distribution mandate.

It is apparent that Eskom is not sitting back and adopting a wait and see approach. Eskom is proactively repositioning its Distribution business to address operational needs and an anticipated broader role into the future.

The question needs to be asked of the other 175 distributors. What are they doing about their business? Are the business operations effective and efficient? Are the appropriate business strategies in place? Is consideration being given to the future of the broader industry?

There is no doubt that some distributors are addressing these matters, but anecdotal evidence points to the fact that the majority of distributors are not strategically positioned to meet the challenges of the future. There is a real risk that the industry reform will now take place by default and without proper integration and optimisation.

8. The Future

Despite strong evidence that the current structure of the electricity distribution industry leads to sub-optimal outcomes, the in-principle political support for restructuring and appropriate levels of resources made available; EDI Holdings has not been able to facilitate significant progress towards changing the operational realities of electricity distribution over the past seven years. So where does the EDI in South Africa go from here? Opinions on the need for and nature of reform required differ significantly. Many opinions, unfortunately, but perhaps understandably, are driven by vested stakeholder interests.

While no stakeholder can claim to be unbiased, it is our considered view, based on extensive industry experience and research, that a number of critical aspects of the industry need to be addressed. These include, but are not limited to:

Macro and Operational Reform

- Maintain the reform momentum built up over the past number of years by EDI Holdings and participating stakeholders.
- Develop and implement an integrated and holistic electricity supply industry reform programme.
- Develop and implement the concession concept as an interim industry consolidation strategy by encouraging stronger entities to partner with the weaker ones.

- Focus on the EDI stabilisation with particular focus on the key aspects of service delivery and revenue management.

Regulation, Governance and Performance

- NERSA to ensure that the ringfenced status is maintained in the sixty entities where this work has been done and promote the ringfencing of the outstanding municipalities.
- NERSA to enforce much tighter regulation of the EDI and deal effectively with non compliance.
- Implement a tariff harmonisation process and leverage the work done in this regard by EDI Holdings.
- Establish benchmarking as a best practice in the electricity distribution industry.
- Use the benchmarking results to inform policy, to direct investment decisions, to guide the tariff regime and to enhance compliance.

Asset investment

- Secure the required funding and resources and implement ADAM as a national asset management turn around solution.
- Establish the required programme management capability within DoE to effectively manage the portfolio of projects associated with the energy sector.

Skills

- Develop and introduce an appropriate EDI skills development programme.
- Develop strategies to actively attract skills into the industry.

It is critical that these recommendations be incorporated into strategic plans for the industry if we are to see meaningful progress towards a more efficient industry. To this end, it is essential that the collective EDI leadership assumes accountability for the future of the industry and makes it happen.

9. Conclusion

It is the considered view of the two authors, with a combined experience in the industry of over sixty years, that all is not well in the industry. The maintenance of the status quo is not a viable holding position as the status quo represents an ever deteriorating industry. Not doing anything proactive results in a compounding of the problem. Restructuring by default is also not an option since it can, at best, only lead to a sub-optimal outcome. If an all fall down scenario is required to make key decision makers realise the need for change, the recovery is going to be long and complex. There are many parallels and lessons to be learnt from the Generation capacity constraint blackouts of 2007/8. Apart from the immediate direct cost and the impact on every aspect of South African society, the recovery cost has been enormous and has left us with a Generation industry very different from the one before the capacity constraints. The mindset on electricity has changed, which in some respects is positive, but the economic fall-out will be felt for generations to come. Can South Africa really afford as similar scenario in the Distribution sector? Raising R30 billion, finding resources, making some tough political decisions around non performing entities are all challenging problems, but ultimately the price and the pain of being proactive will be far less than that of recovery from the consequences of the maintenance of the status quo approach.

So who are we waiting for to take action? It is mission critical that the stronger distributors/entities in the industry take the lead and through a well directed programme of initiatives start to shape the EDI into a sustainable industry. It is in this space where the Department of Energy and NERSA will have to provide thought leadership and leverage initiatives such as the Approach to Distribution Asset Management (ADAM), tariff harmonisation, benchmarking, standardisation etc. However, each member of the AMEU has some control over the future of the industry and collectively the AMEU has significant influence and muscle power. The apparent reluctance of other industry stakeholders to take action does not exonerate individual entities from taking action. If you believe the industry is sub optimal, do your bit. The future of this industry is in our collective hands. We all have a lot to lose if it falls apart.