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THE EVOLUTION OF STATE OWNED ENTERPRISES IN SOUTH AFRICA

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The opinions and views expressed and arguments employed herein are those of the author and do not necessarily reflect or represent the official views of the OECD or of the governments of its member countries.
The Evolution of State Owned Enterprises in South Africa

Executive Summary

Over the twentieth century, the growth and development of the South African economy was overwhelmingly based on the mining and export of diamonds and gold and then in the second half of the century, the export of bulk and some processed resources, such as coal, iron ore, aluminum and manganese. The process of establishment, operational and commercial practices and culture of the key infrastructure utilities (which had a not for profit mandate and were initially called State Owned Corporation (SOC) and on their commercialization were to be re-named State Owned Enterprises (SOE) later in the century) were integrally shaped by their role in the resource based economy, although they had their origin in the desire by the state to move beyond a dependence on mining and foreign enterprises.

The state owned resource processing companies established in the first half of the century were part of a project to diversify the economy, although their growth was often enabled by, and dependent upon, the mining houses. The electricity utility company (Escom which was later to become Eskom in the 1980s) also enabled the establishment of an energy intensive resource processing sector, such as in steel and aluminum production. To the extent that an industrialization process specifically relating to manufacturing took place in South Africa during the twentieth century, it was over-whelmingly driven by investments from, and the markets created by, the large mining houses, particularly Anglo American. However, this process was unsustainable given the inward, looking isolated nature of the Apartheid economy and the contradictions between the needs of a technologically dynamic industrialization process and the Apartheid policy of cheap, poorly skilled, (transient) migrant labour.

When the ANC assumed power in 1994, the new government was largely captured by the neo-liberal economic project accompanied by a series of policies to further the goals of black economic empowerment (that is aimed at addressing the gross racial inequalities in the economy.) The Department of Public Enterprises was called the
“Office for Privatisation” whose over-whelming mandate was to sell its portfolio of State Owned Enterprises. Intrinsic to this position was the notion that government has no active role to play in the economy. This policy was modified into a strategy of “Restructuring” the focus of which was to prioritise the introduction of the private sector into key areas of the SOE value chain, whilst continuing with Initial Public Offerings (which was a form of privatisation). The privatization and restructuring policies and associated processes resulted in a range of destructive developmental impacts. The privatised Telkom (telecommunications) became (despite the Regulators best efforts) a rent extracting monopoly, who stopped investing in new broadband capacity and technology and whose empowerment partner ultimately included the former Director General of the Department of Communications, who had driven the privatization process and had created the policy environment that supported Telkom’s monopoly position. The privatization of Iscor (steel production) ultimately resulted in its control by Arcellor Mittal who extracted significant monopoly rents (through import parity pricing) which undermined the competitiveness of the engineering sector. In addition, during this period, SOE (including key infrastructure providers) were prevented by policy from investing in new capacity or maintaining capital projects capabilities, as this investment was supposed to come from the private sector. The investment did not materialize because of a combination of an incoherent policy and regulatory environment and, in certain instances, Union resistance to restructuring. This resulted in an acute infrastructure shortage as the economy grew.

It was only in 2004 that a firm decision was taken that government was to retain ownership of key SOE and that SOE were given strategic economic mandates by the state to guide their strategies and business plans. Infrastructure SOE were also instructed to establish aggressive investment programs. These were later expanded upon to support the needs of a growing economy, rather than what their balance sheets could comfortably accommodate. This took place in the absence of any formal government policy relating to the role of SOE or their capitalisation. Over time, given the often contradictory policy and regulatory regimes, these investment processes extended the SOE operations and balance sheets to breaking point. In addition, a broadband infrastructure provider SOE was established to compete with Telkom which resulted in the dramatic lowering of the costs of broadband.
As the debate around the building of a developmental state has progressed, the Department of Public Enterprises developed a shareholder management model for SOE and developed a robustly developmental vision for the role of SOE. The new vision focused on optimizing the impact of SOE on their customers and suppliers with a focus on driving industrialization and the racial transformation of the economy, whilst ensuring that the SOE remained financially sustainable. The supplier and skills development programs have made significant progress and point to the role of the shareholder as change manager. However, the need for SOE to support emerging industrial sectors has proven complex and points to the intrinsic tension between the centrality and profitability of resource sector customers versus the complexity and relatively small scale of emerging industrial sectors. Managing this tension will require specific revisions to the shareholder management model.

Moving forward, it has become apparent that a firm policy is required pertaining to the role and oversight of SOE and development finance institutions across the state given a range of contradictory policies within the state impacting upon the viability and impact of SOE. A Presidential Commission was called in this regard and although it has made recommendations calling for greater policy consistency within government, these are yet to be actioned upon. However, at a more profound strategic level, there is a need to build a developmental coalition between the SOE and the resources sector around the industrialization and transformation projects, if these programs are to achieve a critical mass. While some preliminary processes have started in this regard, the substance of such an alignment is yet to be achieved.

The paper provides a series of case studies to illustrate how SOE are being directed by the shareholder to deliver on developmental outcomes, often in spaces where market or institutional failures would make such outcomes unlikely if left to private enterprises. These studies include:

- Driving Investment in broadband infrastructure following policy, regulatory and market failure: the establishment of Broadband Infraco.
- Driving Investment in energy following policy and regulatory failure – Eskom as the (disempowered) supplier of last resort.
- Driving Investment to meet market needs as a monopoly provider – the Transnet Market Demand Strategy.
- Supporting industrialization – the establishment of the SOE Competitive Supplier Development Program.
- Supporting industrialization – providing a special dispensation to emerging industrial sectors.

The paper will also include a discussion on the design of the DPE’s shareholder management model and how this has changed over time to accommodate more ambitious developmental objectives. It will conclude with some reflections on the role of the shareholder manager in driving developmental objectives.

The paper is divided into the following sections:

- A history of the establishment of key state owned enterprises in the context of the pre 1994 economy.
- A history (using case studies) of SOE privatization and restructuring policies and their impact just pre and post 1994 to 2004 and the ultimate emergence of SOE as instruments of a developmental state post 2004, how the DPE deployed the SOE to achieve development outcomes and the tensions that remained between the developmental objective and a range of sector and other regulatory policies.
Brief History of SOE and Industrialisation during Apartheid

In the early decades of the twentieth century a number of State Owned Corporations (SOC) were established. These included:

- the establishment of the Department of Posts and Telegraphs in 1910. The department over-saw the development of postal, telephony and broadcasting infrastructure and related services.
- the establishment of the South African Rail and Harbors (SARH) company in 1916.
- the establishment of the Electricity Supply Commission (ESCOM) in 1922 to build generation, transmission and distribution infrastructure (which in the 1980s became a corporatized company (Eskom)).
- The establishment of the Iron and Steel Corporation (Iscor) in 1928 to promote South Africa’s industrial development.

The underlying motivation for the establishment of these Corporations was to provide the state with the instruments to enable the building of a diversified industrial economy. In particular, the state was concerned with the security of supply of strategic inputs at competitive, if not developmental, prices in a context where the gold mining companies were economically dominant and the country was completely dependent on the importation of foreign equipment and technology. ¹ In practice, over the course of the century, the Corporations were to also play a key role in racially based job segregation and Afrikaner empowerment, although this was not a simple process, particularly in the first half of the century as the Corporations struggled to survive.

The relationship between the SOC and the mining industry was a complex one. Over time, the interests of the mining industry, particularly Anglo American, and the SOC became increasingly aligned against the rent seeking practices of foreign infrastructure providers and input producers as the gold mines sort to lower costs.

¹ See in particular Clark N, Manufacturing Apartheid: State Corporations in South Africa, Yale University Press 1994 for an excellent overview of the establishment and growth of State Corporations – the account in this paper of Eskom and Iscor is based on this book.
In 1950, Sasol was established to both beneficiate coal, to alleviate balance of trade pressures and to enhance national fuel security in the context of the Apartheid state that was constantly threatened by sanctions. However, it was only in 1976 and 1979, with the establishment of Sasol II and III, that produced fuel from coal of sufficient quantity to meet half the country’s petrol requirements, that Sasol achieved major scale. The period 1950 to 1994, saw the rise of energy intensive resource processing industries as Eskom implemented a massive build program to beneficiate the country’s coal reserves and create an energy platform for industrialization. This created the platform for the emergence of the so-called minerals-energy complex consisting of the upstream and downstream linkages between resource extraction constituted by resource processing, infrastructure provision and capital goods manufacture. Fine and Rustomjee demonstrate that the mining industry made a disproportional quantity of investments in energy intensive resource processing plant (in areas such as specialized steels, aluminum, ferrochrome smelters etc) in the 60s, 70s and 80s in response to this incentive.² These investments were made in partnership with a state owned development finance institution, the Industrial Development Corporation. By 1989, the complex accounted for around 30% of GDP and up to 95% of exports.³ Of note, is that a small group of energy intensive users (numbering around 30 companies), linked to mining and resource processing consumed over 50% of Eskom’s electricity production and that the iron ore and coal export lines, constructed in the 70s, made up only 6.7% of the network, but by the new millennium accounted for 56 percent of the tonnage and about 60 percent of the tonne-Km carried by the railway. The transport of bulk resources by rail made up over 90% of rail’s revenues. The dependence of the SOE on revenues from mining and resource processing customers cannot be over-emphasized.

Finally, a special note should also be made of the state’s involvement in defence related industries, initially consolidated under Armscor in 1968 and corporatized into Denel in 1992. Through defence industries, advanced engineering capabilities were developed, although there was limited opportunities to manufacture at the scale required to be globally competitive.

² Fine and Rustomjee; The Political Economy of South Africa, Hurst and Co 1996, Pg163-171
³ Ibid, p233.
The following case studies around the establishment and growth of Eskom and Iscor gives texture to the complex relationships between SOC, the mining industry and foreign producers as well as the role played by SOC in the economy prior to 1994.

**Building a National Electricity Grid: the Establishment of Escom**

The Electricity Supply Commission (ESCOM) was established in 1922 to build generation, transmission and distribution infrastructure in order to supply electricity at the lowest possible cost. ESCOM was constitutionally not allowed to make a profit or loss and was exempt from corporate income tax. While there were a number of economic and technical motivations for the establishment of ESCOM, it is important not to under-estimate the centrality of the establishment of the SOC as an intervention in a political economy dominated by foreign owned mining companies and infrastructure providers\(^4\). Motivations for the establishment of ESCOM include:

- To start a process of building a single national grid or network through linking different generators together.
- To support the development of the railways through providing a secure and cheap electricity supply to key routes in the rail network and to adjacent towns.
- To support industrialization through (particularly) providing cheap electricity to an emerging steel and manufacturing industry and consequently diminish dependence on gold exports.
- To ensure security of electricity supply though having direct control of the production process (and particularly labour and its cost) in the context of high levels of labour unrest in private enterprises.
- To localize ownership of the electricity supply industry: the Victoria Falls Power Company (VFPC) which dominated the sector was “financed in Europe and serving the mines, the VFPC was a successful conduit for

exporting capital outside the country, rather than assisting local capital accumulation."\(^5\)

- To counteract the dominance of the mining companies in the economy – the VFPC was established by Rhodes and the shares were held by British Financiers and gold mining companies (particularly Consolidated Gold Fields of South Africa. The company held supply contract with all the major mining groups on the Rand and reaped large profits from its monopoly.

The development paradigm underlying the establishment of ESCOM was thus based on two premises:

- The state is the only stakeholder with an interest in ensuring continuous and as low cost as possible security of electricity supply to support an industrialization process and needs to make direct investments in operational capacity to ensure that this is achieved.

- In an emerging economy, it is critical that the state systematically builds national champions with the economies of scale and scope to optimise the national economy as well as compete globally to avoid the economy being “colonized”, controlled and rents being extracted by international players in strategic areas.

For a period after its establishment, an accommodation was reached between Eskom and the VFPC. ESCOM would finance and own new power stations and the VFPC would build and operate them. The industry started using cheap, low-grade coal and producing very low-priced electricity. However, these savings were not passed onto end customers, particularly the mines by the VFPC who was effectively extracting monopoly rents from the captive sector. Ernest Oppenheimer angrily wrote to the Smuts Government claiming that “the VFPC policy is to demand their full “pound of flesh” and any approaches by the mining industry to the VFPC for a revision [of prices] is doomed to failure. The only way in which an equitable state of affairs can be brought about is by government

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\(^5\) Clark, pg 105
In 1948, when VFPC’s initial operating concession on the Rand expired, ESCOM purchased the VFPC. Over half the capital required for this acquisition was provided by Anglo American. The motivation for the loan was because the VFPC was abusing its monopoly position and the mining sector preferred to have a SOE with a developmental mandate controlling the electricity industry. To quote Sir Ernest Oppenheimer: “the VFPC policy is to demand their full “pound of flesh” and any approaches by the mining industry to the VFPC for a revision [of prices] is doomed to failure. The only way in which an equitable state of affairs can be brought about is by government intervention.” 7 Anglo immediately benefited through a rebate (or profit share) and further benefited when in 1952, ESCOM halved the unit price of electricity to the mines. Anglo mines supplying ESCOM with coal were also incentivized to keep prices down as Anglo did not want to provoke an electricity price increase. ESCOM became the over-whelmingly dominant player in the industry, controlling most power stations as well as high voltage transmission lines.

Without the VFPC preventing ESCOM from optimizing the system as a whole, the company set about establishing a national grid. “By 1969, the national grid was complete, allowing Cape Town for the first time to enjoy the benefits of cheap electricity generated on the Transvaal coalfields” 8 (over a thousand miles away.) Eskom had become a de facto vertically integrated monopoly and the supplier of last resort in both theory and practice.

In the 1970s it became apparent that investment in electricity infrastructure had not kept up with growing demand as the reserve margin dropped below 15%. In addition, core to industrial policy was to leverage Eskom to beneficiate coal into electricity so as to enable the development of a range of other mineral processing activities (such as steel production, aluminum smelters etc etc.) The result was an extremely energy intensive growth with demand in electricity more or less double that of GDP growth. Eskom commenced a power build program that added 26GW between 1976 and 1993 of generating capacity to the network.

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8 Clark N, ibid, pg157.
(Figure One). The build program was characterized by the construction of very large “six pack” generators in proximity to coal mines to realize large economies of scale.

**Figure One: Capacity Additions in the 70s and 80s**

<table>
<thead>
<tr>
<th>Name of power station</th>
<th>Date of commissioning</th>
<th>Net maximum capacity MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Komati</td>
<td>1961–1966</td>
<td>906</td>
</tr>
<tr>
<td>Camden</td>
<td>1966–1969</td>
<td>1520</td>
</tr>
<tr>
<td>Grootei</td>
<td>1969–1977</td>
<td>1130</td>
</tr>
<tr>
<td>Hendrina</td>
<td>1970–1977</td>
<td>1900</td>
</tr>
<tr>
<td>Kriel</td>
<td>1976–1979</td>
<td>2850</td>
</tr>
<tr>
<td>Koeberg</td>
<td>1976–1985</td>
<td>1840</td>
</tr>
<tr>
<td>Matla</td>
<td>1979–1983</td>
<td>3450</td>
</tr>
<tr>
<td>Duvha</td>
<td>1980–1984</td>
<td>3450</td>
</tr>
<tr>
<td>Turuka</td>
<td>1985–1990</td>
<td>3510</td>
</tr>
<tr>
<td>Lethabo</td>
<td>1985–1990</td>
<td>3558</td>
</tr>
<tr>
<td>Matimba</td>
<td>1987–1991</td>
<td>3690</td>
</tr>
<tr>
<td>Kendal</td>
<td>1988–1993</td>
<td>3840</td>
</tr>
<tr>
<td>Majuba</td>
<td>1992–2001</td>
<td>3843</td>
</tr>
</tbody>
</table>

*Source: Eskom Statistical Yearbook, 1995.*

Eskom has been roundly criticized for the apparent over-investment in infrastructure during the 1980s build program. (Figure Two) However, this must be seen in the context of an economy that grew on average at 0,7% p.a. between 1980 and 1992 compared to an average of 3,5% p.a. growth between 1970 and 1980. Energy growth decreased from 9,3% p.a. on average between 1970 and 1980 to 4,8% p.a, a decline of nearly 50%. Had growth been sustained at the previous rates in this period, Eskom would have required additional build during the 1980s (over and above what was actually built in that period).

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9 Eberhard, Pg 220.
Laying the Basis for Industrial Growth: The Iron and Steel Corporation (ISCOR)

Iscor was established in steel manufacturing in 1928 to promote South Africa’s industrial development in a context where government was seriously concerned over the country’s steel supply because European producers were forming a cartel which threatened to raise import prices. Both as a means of survival and to catalyse manufacturing development, Iscor set about establishing subsidiary industries, in partnership with private companies that were, in effect, Iscor’s future customers. Iscor formed marketing organisations with importers who had established customer bases which resulted in these sectors substituting Iscor steel for imported steel at the same price as British imports.

After it became apparent that Iscor could not compete with imports to supply rails to the SA Railways, Iscor began to systematically build a market for its output through contributing funding for the establishment of new factories, in partnership with foreign firms, who provided the technical expertise and mining houses who provided additional capital. This included the establishment of wire-works, the

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10 Eberhard pg219
expansion of bolt and nut production, the establishment of factories that produced drill and tool steel, agricultural implements, electricity cable, fabricated steel products. Iscor also expanded upstream into coal mining and purchased a road construction company to use the tar produced as a by-product of the steel production. Iscor came to a pragmatic agreement with the European cartel that effectively limited imports and put a floor on prices, guaranteeing everyone profits (at the expense of consumers).

As a result of a process of consolidation in the mining industry, Anglo American became Iscor’s de-facto key partner through their stakes in the downstream factories established by Iscor (as well as a number of companies that provided equipment (such as steel pipes) to the mines. Anglo now had a vested interest in facilitating the growth of steel production in South Africa. This had immediate benefit as it ensured Iscor a good coal price as Anglo “would probably not raise its coal prices to businesses in which it held investment.”

Despite some initial hiccups when the National Party (who were suspicious of Iscor’s relationship with the mining sector and overseas companies) came to power, in 1950 the company, with Anglo’s support, was able to raise the capital to build a vertically integrated steel plant at Vanderbijlpark which was completed in 1952. By 1955, the company was producing 70% of the country’s steel requirements. In the following decades, the company expanded its facilities at Vanderbijlpark and established a new integrated steelworks in Newcastle in 1971.

**SOC, the Mining Industry and Industrialisation**

Much has been written about the historical relationship between the mining sector and oppressive labour practices both within and outside of the mines in South Africa. However, at another level, it also need to acknowledge that to the extent that the economy is industrialised, it was over-whelmingly a result of a resource driven industrialization process. This process gave rise to the so called minerals-energy complex. The driving force in establishing the complex was effectively a partnership between the mining sector and the state.

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11 Clark, ibid, p147.
By the 1950s, the mining sector had an intrinsic interest in investing in, and supporting, an industrialization process. Sporadically, through the first half of the twentieth century, the different mining groups had invested in supplier industries as a means of securing supply, getting comparative advantage (e.g. in specialist drilling equipment) and to diversify their investments. With the rapid expansion of the gold mines in the 1950s, this process of investing in mining related activities gained momentum, partly driven by import tariffs and the need to keep the mine cost structure down, so that by 1960, the mining houses interests in industry ranged from 5% to 22% of their total assets. The mining houses also made investments in downstream activities such as ferro-alloys and stainless steel. It is key to recognize that the mining groups were “better placed to produce these commodities than most local industrialists, since not only did they have the financial resources to embark upon large scale production, but they also had at their disposal the means to meet the complex technical needs of the mines. As large institutions with a network of international connections, the groups were able to gain access to and benefit from the technical advances being made in the developed centres of capitalist production. Consequently, most of the industrial concerns under group control entered into technical agreements of one kind or another with important overseas industrial concerns in order to apply that expertise to South African conditions.”

Innes argues that while the introduction of the “Blocked Rand” in 1961 (which impeded the export of capital from South Africa) created some pressure to invest locally, it was not decisive as the system did not prevent the repatriation of dividends. Consequently, the diversification of investment by the mining houses, which began on scale in the 50s and accelerated in the 60s was also driven by strategic business considerations from within the mining houses. The massive infrastructure build program of the 60s and 70s, combined with local content rules also created a significant market for investments in the heavy engineering industry. The result was the rapid growth of GDP (at 9,3% between 1963 and 1968) with manufacture expanding at 8,4% during this period. Anglo American alone had investments in African Explosives Highveld Steel and Vanadium, Boart and Hard Metals, Transalloys, Forest Industries and Veneers and Mondi Valley Paper. In a

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12 Innes D; Anglo American and the Rise of Modern South Africa, 1984, Heinemann, pg194
13 Ibid, pg183
similar strategy to that followed by Iscor in the thirties, these anchor investments resulted in additional investments by the group as Anglo brought into companies that would purchase their output. For example, the investment in Highveld Steel resulted in investments by Anglo in Scaw Metals, Stewarts and Lloyds, Union Carriage and Wagon and Hall Longmore.

Although there was significant investment in industrial plant took place, the development of globally competitive manufacturing capabilities remained weak with the exception of a few capabilities directly related to the design and manufacture of mining equipment. This was a result of a number of factors:

- The entire Apartheid “eco-system” with a focus on cheap, transient, unskilled labor was not compatible with building an adequately skilled labor force or a large enough middle class to support an industrialization program.
- Because of combination of sanctions and crude local content rules, industry consolidation in capital goods manufacturing focused on achieving a monopoly position in the local market, rather than building scale and capabilities to engage globally.
- Given the relative isolation of the market, there was limited pressure on South African manufacturers to become “technologically dynamic” and benchmark their activities globally.
- Mining houses were often at best reluctant owners of manufacturing concerns and divested from these companies as soon as they could use their capital in resource extraction.

The Mining Industry, Privatised Companies and Industrialisation Post 1994

Between 1994 and 2004, government was dominated by a “neo-liberal” agenda, based on “freeing up the market” and removing the state from any direct involvement in the economy. Tariffs were removed faster and to a greater extent than the schedule required by the World Trade Organisation. A process of fiscal consolidation took place and government (including SOE) investment in infrastructure (or gross fixed assets) dropped from the 1976 high of 16% of GDP to around 4% - 5% over the decade from 1994. SOE’s were not allowed to invest (even off their balance sheets) as they were supposed to be privatized (see next
section). The result was a flood of imports and a dramatic drop in local demand for capital goods which had a catastrophic impact on key national manufacturing industries. (See Figure Three, Four, Five). (The exception to this rule was the motor industry which the state could not afford to let collapse and where a very comprehensive industrial policy resulted in the rapid growth of the sector.)

**Figure Three: Gross Fixed Capital Formation and the Decline of Related Manufacturing Sectors**
Given the centrality of the sector to the history of the country, the debates around the rents associated with mining and the extra-ordinary wealth accumulated by specific families as a result of their ownership of mining companies the political economy of the mining sector was particularly fraught during this period. Government policy focused on redistributing ownership through linking a reformed licensing process to black economic empowerment. The consequence of this focus, combined with the failure to invest in new infrastructure and the decline of gold mining, was a relatively stagnant sector that ultimately was not
able to take advantage of the commodities boom in the new millennium. While the overall economy grew at 3.6% per annum between 1998 and 2008, and the global mining industry grew at 5%, the South African mining industry actually shrank by 0.8% per annum (Figure Six).

**Figure Six: The Relative Decline of Mining**

In addition, it has become apparent that the economic incentives driving private company behaviour in a range of strategic areas of the economy are not aligned to a national industrialisation objective. The propensity of private companies to cherry pick value chains and exploit market power is a reality, even when a National development finance institution or state pension fund is a significant shareholder- this was particularly stark in the case of privatised SOE. Examples of this include:

- The extraction of monopoly rents by the Mittal South Africa (who procured a controlling stake in the privatized Iscor) through import parity pricing despite (until recently at least) having privileged access to cheap iron ore and energy. (See Figure Seven, Eight).
- The extraction of monopoly rents in chemicals by SASOL through import parity pricing and the failure by the company to make lead investments in
products to support national economic development despite having the petrol price under-written by government for many years.

**Figure Seven: South African Steel Price in Comparison to Global Prices**

As can be seen from the above, the fact that a company had a history of state ownership, did not impede predatory economic behaviour when it was privatised. Similarly, that government gave special concession to under-write the viability of

![Figure Eight: The Cost Impact of Import Parity Pricing](image-url)
a number of these companies in the event of a down-turn, but failed to get a share of the upside in the event of super-profits.

The net impact of the above situation is that the financial sector, retail and property sectors have boomed whilst key productive sectors in the economy, notably mining and manufacturing have performed very badly. Manufacturing and mining sectors declined from 38% of GDP in 1994 to 23% in 2014, while banking and real estate grew from 17.2% in 1994 to 23.9 percent of GDP. This has contributed significantly to the remarkably high level of structural unemployment of around 25%.

**SOE and Economic Development Post 1994**

In the 1980s, just prior to the ANC assuming power, an effort was made to transform state owned corporations from not for profit entities, (who were ultimately operating more like government departments than corporations) into commercial-based State Owned Enterprises (SOE). In addition, two enterprises were privatized, namely Sasol and Iscor.

When the ANC assumed power in 1994, the Department of Public Enterprises was called the “Office for Privatisation” whose over-whelming mandate was to sell its portfolio of State Owned Enterprises. Intrinsic to this position was the notion that government has no active role to play in the economy. This policy was modified into a strategy of “Restructuring” the focus of which was to prioritise the introduction of the private sector into key areas of the SOE value chain, whilst continuing with Initial Public Offerings (which was a form of privatisation). During this period, SOE (including key infrastructure providers) were prevented by policy from investing in new capacity, despite the growing economy.

Between 1994 and 2004, the following “restructuring” processes took place:

- An equity stake of 20% was sold in SAA in June 1999 To Swiss Air but deal was reversed in November 2001 after a global recession and Swiss Air was more concerned with survival than SAA.
• An equity stake of 20% was sold in the Airports company to Italian Aeroporti di Roma in April 1998 but reversed in September 2005 and sold to Public Investment Corporation

• Strategic foreign investment partners were introduced to Telkom in 1997 – in 2003 Telkom Initial Public Offering was concluded and the foreign strategic investors exited in 2004.

• 236 000 hectares of SAFCOL forests privatised as of 1998 until competition problems reversed sale of the final allotment.

• In Transnet around 40 non-core business units were sold over 24 months to enable greater focus although enterprise still active in a range of non-strategic infrastructure provision areas. Concessioning of the Durban Container Terminal Port and the Sishen Saldhanna Iron Ore Rail Line were attempted but stopped by effective Union resistance (probably with management support)

• In Alexkor (a diamond mining company) a strategic equity partner was sought for in 1998 but land claim of 3000 persons dating back 156 years derailed the process.

The policy environment in the period prior to 2004 was profoundly antagonistic to SOE, literally to the point where the logic of policy was “it is more important to privatise SOE than to sustain investment in strategic national sectors”. Consequently, infrastructure SOE were prohibited from investing in fixed assets and forced to close down their capital procurement capabilities. In addition, major maintenance projects were put on hold. The negative economic impact of these policies cannot be under-estimated:

• Gross fixed capital investment stayed between 4% and 5% of GDP between 1994 and 2004, creating a significant infrastructural backlog and associated constraint on growth.

• It resulted in the drastic decline of capital equipment manufacturing sectors that supplied the infrastructure sector in terms of investment, output and employment which has contributed to the de-industrialisation process.

• No funds were set aside for future investment, which was to create significant problems as prices needed to drastically correct.
• It fed the consumer boom and created an economy built around the inefficient use of infrastructure, particularly energy, because of under-pricing.

In 2004, the privatization and restructuring agenda were subordinated to the objective of deploying SOE to achieve strategic nation objectives, which over time, were to become formally defined by shareholder managers through strategic intent statements and shareholder compacts. At a national level, the notion of building the South African state as a “developmental state” became increasingly hegemonic. This resulted in the redefinition of the vision of the DPE to:

“drive investment, efficiencies and transformation in its portfolio of State Owned Companies, their customers and their suppliers to unlock growth, drive industrialisation, create jobs and develop skills.”

The vision required that the DPE oversee the SOC to ensure that they were both financially stable and that their developmental impact on the economy would be optimized. In particular, there was a concern to drive the positive developmental impacts of the SOC on their supplier and customers. This required a change in the investment planning paradigm from a balance sheet focus, to investing at a sustained rate that would unlock growth in the economy. The increased and predictable rate of investment would then provide a demand platform for investment in SOE capital goods supplier industries. (See Figure Nine and Ten).

**Figure Nine: Shareholder Management with a Balance Sheet Focus**
The DPE’s organizational structure was changed to establish new capabilities to support the new direction. The Strategic Partnerships Division was established with the objective of catalyse projects, develop guidelines, accumulate and disseminate knowledge and facilitate the building of partnerships that substantively enhance the developmental impact of SOC beyond their conventional business horizons.

Three Chief Directorates were established in the division:

- A Strategic Relationships Directorate which focused on implementing initiatives to enhance the relationships between the SOE and key industrial and resource customers as well as SOE suppliers with the objective of promoting investment, industrialisation and transformation.
- A Strategic Projects Directorate which focused on enhancing shareholder oversight of the build program, with a specific focus on large infrastructure projects involving a range of stakeholders. In particular, the Directorate was tasked with establishing an information technology system which would provide a progress and risk dashboard for the program.
- A Funding Directorate which was focused on identifying private sector sources of funding for the SOC build programs and supporting the structuring of deals involving these stakeholders. This Directorate also led the design of an SOC Africa expansion strategy.
In the coming sections a number of case studies will be provided to illustrate different dynamics associated with shareholder oversight of SOE to achieve specific developmental objectives. These are:

- **Intervening in Telecommunications – The Establishment of Broadband Infraco**: This case study describes how the privatization of Telkom resulted in a rent extracting monopoly that stopped investing in new capacity and technologies. The DPE intervened to establish a new SOE to create competition, establish additional capacity and reduce broadband prices.

- **Eskom’s Investment Program – The Political Economy of Power Sector Reform**: This study will explore the impact of neo-liberal ideology on power sector reform and how this created a paralysis in new investment. It also demonstrates that there remain important contradictions in energy sector policy and the de-facto role that Eskom is playing as supplier of last resort that are putting the energy system at risk.

- **Investing for Growth: Transnet’s Market Demand Strategy**: This study will show the design of a new SOE corporate strategy and investment plan to unlock broader economic growth in response to the shareholder request to change the planning paradigm.

- **The Competitive Supplier Development Program**: This case study will describe the establishment, some of the impacts and the lessons learnt in designing and establishing a supplier development and localization program on the back of the SOE investment programs.

- **Supporting Industrialisation in selected SOE Customers**: This case study will describe initiatives taken by the shareholder to provide special support for emerging industrial sectors, in a context where SOE revenues and profitability are strongly dependent on resource related customers.

**Intervening in Telecommunications – Broadband Infraco**

Prior to the early 1990s and during the apartheid era, the South African Post and Telecommunications (SAPT), a government department, functioned as both the monopoly provider and regulator of telecommunications. As might be expected, the provision of telecommunications was characterised by extreme racial inequality. For example, in 1978 teledensity (lines per 100 households) was 71.5
in the white community while in black rural communities, it was only 1.8 (White, 2004b).

The late 1980s saw aspects of the telecommunications market liberalised, with PABX and value-added network services (VANS) markets opened up to competition, but the SAPT continued to be run as a government department until 1991 when postal and telecommunications services were separated by law. In 1992 the SAPT was corporatised. A company, Telkom SA Limited (Telkom) was established as a state-owned entity to provide telecommunications services while a much smaller government department (of Communications) acted as the industry regulator. However, in substance, although there were changes to corporate governance, Telkom’s monopoly position remained largely unaltered.  

After 1994, the ANC-led government focused on providing broad-based and affordable access to communications services. A first wave of telecommunications sector reform started and a highly consultative process resulted in the 1996 Telecommunications Act. The Act gave effect to the developmental objectives of the preceding White Paper and legislated for the provision of universal service, consumer protection, competition and innovation, growth and investment and the ownership and control of services by historically disadvantaged groups. It also established the first telecommunications regulator, the South African Telecommunications Regulator (SATRA), and ostensibly put in place a three-tiered approach to the sector, separating policy making, operations and regulation. Importantly, the Act granted Telkom an initial five year period of exclusivity to provide PSTN (fixed line) services in exchange for meeting certain specified universal service targets, and an option to extend its monopoly for a further year should these targets be met.

In 1997, Telkom was partially privatised through the conclusion of a strategic equity partnership worth $1.26 billion. Driven by the need to attract capital and management experience to transform the debt-ridden monopoly, prepare it for competition and facilitate universal service access, government sold a 30% stake

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14 This is based on Kuhn A, Explaining interference in South Africa’s telecommunications regulator, Unpublished MA dissertation, 2006.
to Thintana Communications giving it effective management control. Telkom was managed for profit maximisation and became a classic monopoly rent-seeker.

In 2001 a second wave of reform took place after the government revisited the way in which state assets, including telecommunications, were being restructured. The focus of government policy was on ‘managed liberalisation’, with the emphasis on optimising the value of state assets and seeking to secure investment through protectionist incentives. May 2002 saw Telkom’s *de jure* monopoly end, but due to delays in the licensing of the second national operator (SNO), it enjoyed a *de facto* monopoly for an additional four years and beyond.

In 2003, there was an initial public offering in which the government disposed of a further 25% share of its interest in Telkom and the company was listed on the Johannesburg and New York Stock Exchanges. In 2004, Telkom’s initial strategic equity partner Thintana sold 15.1% of its stake to the state-owned Public Investment Corporation, and 14.9% to a consortium led by the former Director-General of the Department of Communications, known as the Elephant Consortium.

Telkom charged monopoly prices for access to broadband and stopped investing in new capacity whilst large dividends were paid out to its shareholders. The situation was exacerbated because the Department of Communications, who was also the Policy Department, held Telkom’s shares on behalf of government (rather than the DPE). This created a conflict of interest between the Department’s role to protect the consumer and the Department’s desire to optimise the value of its investment. This situation completely undermined the under-resourced Regulator. The consequences were that South Africa’s competitiveness was significantly weakened as a result of an extremely high price for broadband and very low market penetration as evidenced in Figure Eleven and Twelve.
In response to the situation, the DPE initiated a project to establish a competitor to Telkom in the Broadband space. The Department drove a process of stripping out Eskom and Transnet's broadband infrastructure and associated software. In
addition, the rights of the two SOC to lay infrastructure along rail-lines and power cables was extremely valuable in expediting new investment without having to get new servitudes. These assets were placed in a new SOE, which was called Broadband Infraco (BBI). The process of licensing BBI was not without conflict as it effectively created a competitor to the DoC’s investment in Telkom. Eventually BBI was established through an Act in 2007 which states that the main object of the company is as follows:

“To expand the availability and affordability of access to electronic communications, including but not limited to underdeveloped and under serviced areas, in accordance with the Electronic Communications Act and commensurate with international best practice and pricing”.

Since its establishment, Infraco has invested just over R1 billion on 8000 kilometres of fibre optic cable, which includes a core network linking the main cities, a regional network linking SA with its neighbours and an interface with the EASSY submarine cable linking SA with the world.

Although there have been a multitude of management problems and financial challenges in BBI, the impact of BBI’s establishment was dramatic. Since 2009 the cost of national transmission for wholesale broadband decreased by 75%. Between 2007 and 2010, broadband penetration increased fourfold from 0,5% to 2%. BBI was also able to enter into deals with a number of scientific initiatives (such as the Square Kilometre Array telescope) that require inexpensive access to large amounts of international broadband connectivity. Presently, BBI is investigation how it can enhance access to rural communities, particularly schools and clinics.

**Case Study: Eskom and the Political Economy of Power Sector Reform**

When the ANC came to power in 1994, the focus of the Energy Policy Department was on “managed liberalization” to realize the “benefits of competition and the Multi Market Model”. In 1998, the Energy White Paper objectives were to reduce Eskom’s share of existing generation capacity to 70% and to introduce the private sector for the remaining 30%. Eskom was prohibited from investing in new generation capacity in the domestic market and was
prohibited from building a new Capital Projects Capability. The Transmission Network (together with the system operator) was first to be corporatized and then placed in a separate state owned company (a so called “Independent System and Market Operator) which could then “impartially” manage the market.) Until this state owned company was established, policy dictated that no new investment in generating capacity would be allowed.

In addition, as part of the process of comprehensively removing oversight of the system from Eskom and establishing a “neutral” environment in which the private sector could invest, the Policy Department would now be responsible for a range of processes associated with the role of supplier of last resort. The granting of these powers to the Policy Department was not based on any milestones demonstrating that the Department had the capability and capacity to deliver on these responsibilities. These powers included:

- Responsibility for long term planning of capacity requirements and the kinds of energy technologies that would be deployed to meet these requirements.
- Responsibility to determine who will be mandated to provide the capacity to meet the requirements.
- Responsibility to procure power from private power producers.
- Responsibility to define a legally binding energy conservation scheme.
- Responsibility to define a demand market scheme.
- Responsibility to implement a demand side management program, including solar water heaters.
- Responsibility to define a protocol for load shedding.

The liberalisation approach gelled well with the strategy of the Department of Public Enterprises (DPE) that emphasized and was built around “An Accelerated Agenda towards the Restructuring of State Owned Enterprises.” In practice, in the case of Eskom, this resulted in the DPE’s support for the DOE’s liberalization strategy.

Eberhard notes that the drivers for electricity sector reform internationally were the desire to improve investment and operational efficiencies, to raise capital
from new private sources, for unlocking the value of existing assets to reduce
government debt and, finally to be fashionable, that is “the felt need to follow the
wave of reform that is now so powerfully sweeping through nearly all power
sectors around the world.” Eberhard further notes that these major drivers for
adopting an industry restructuring program were not “experienced strongly” in
South Africa. Indeed, in a presentation, Eberhard stated that “Corporatised,
commercially run, state-owned Eskom has been able to access private capital
and has delivered low prices, reliable supply and increased access.”

Hence, rather than through any process of developing a bottom up solution to the
specific challenges faced by the South African industry, the 1998 White Paper
that contained the electricity sector liberalisation policies “did not come from any
commissioned studies, nor did they emerge from a formal consultative process
with industry. They were the result of the convictions of a small group of analysts
and government officials who were observing international trends in power sector
reform and were beginning to be concerned with the potential problems of
monopoly power…. Thus the model of power sector reform laid out in the White
Paper mirrors the standard or ideal model being followed internationally; vertical
and horizontal unbundling in order to separate out the potentially competitive
components of the industry (generation and retail supply) from the natural
monopoly components (transmission and distributions wires), the introduction of
competition through new private players, non-discriminatory, open access to
transmission and independent regulation.” The World Bank provided support
for the propagation, legitimation and implementation of the White Paper through
resourcing workshops and the Adam Smith Institute provided access to expert
consultants from the United Kingdom who provided technical arguments that the
approach must be correct because it was “aligned with international best
practice”.

15 Eberhard A, “The Political Economy of Power Sector Reform in South Africa” in “The
Political Economy of Power Sector Reform”, eds Victor and Heller; CUP, 2009. pg 229
16 See http://iis-db.stanford.edu/evnts/3915/Eberhard_Rio.pdf. In the same presentation Eberhard notes the
importance of taking political economy concerns into account when designing the power industry structure
and that “cookbook solutions should be avoided”.
17 Eberhard, The Political Economy..., pg 246
18 See eg. Draft Newspaper Article on sector restructuring written for the DPE by ASI Consultants
Xu Yi-Chong in a paper entitled “The myth of the single solution: electricity reforms and the World Bank” demonstrates that the liberalization template propagated by the World Bank as global best practice was not built on political and economic realities and that “any effort to impose the same template on countries with different political and economic systems and at different development stages is doomed to fail unless it takes into account the local conditions.” He argues that these templates were adopted by local technocratic elites as local elites do not have the resources or capacity to develop an original reform strategy and through imitating a “proven” global best practice model had a means of legitimizing their reform programs and an instrument to “fight against domestic opposition, especially those who resist any change.” Good governance means that there is an efficient management mechanism to design and implement strategies that demonstrate internal coherence in achieving stated objectives and integrity of process and accountability with a set of stated values. Jennings argues that an inherent element of this neo-liberal ideological hegemony was the translation of “good governance” to mean “the progressive liberalization of the economy.”

The Liberalization Policy also got the support of elements of the black economic empowerment movement that aimed to privatize “into the hands of black business leaders a portion of the SOE” and to create further business opportunities for empowerment through additional market liberalization. In addition, large industrial / mining electricity users were also strongly in support of the policy. The only stakeholder who staunchly resisted the policy were the Trade Unions (COSATU) who opposed privatization and argued for the “maintenance of a vertically integrated, public owned utility who should be used as an agent of government.”

20 Jennings, Lecture to the Mo Ibrahim Conference on Governance, Oct 2012, SOAS
21 Eberhard, pg 246
22 Tinto quoted in Eberhard, pg 247
It was in this context, and based on their experience in the 1970s and 1980s, that Eskom made representations in 1998 to the Department of Energy and the Department of Public Enterprises that:

- Eskom’s demand projections suggested that there would be a shortage of electricity by 2008 and it was important to start planning a build program.
- Eskom be given a mandate to start building a capital projects capability and conducting detailed planning for a build program and if necessary, any capacity that was built by Eskom could later be sold to the private sector.
- following the end of the tariff compact in 2000, the tariff formulation model be adjusted to more closely reflect the real costs of producing electricity (it was below both a price determination formula using either historical or current cost methodologies) so that any future tariff increase for a new program would not be as extreme as occurred in the 70s and that government could choose to use any return on equity accrued in Eskom to subsidise a future build program, should this be required. Eskom (and other independent commentators23) reiterated that the historical cost determination methodology would, even if followed correctly, result in major price spikes when there was a need for additional capacity.

These proposals were rejected by the Departments on the basis that Eskom was trying to find a means of maintaining their dominance in the system. In 2001, Cabinet took a firm decision and made a definitive announcement that Eskom would never again build a power station in South Africa and that all new power stations would be built by private sector companies. Despite the continued growth of demand and the narrowing reserve margin, focus remained on the process of restructuring the industry, involving corporatizing transmission, grouping Eskom power stations into “competing clusters” and taking initiatives to develop a multi-market model. Attempts to attract private investment did not get anywhere because of institutional and regulatory uncertainty and a sub-economic tariff. An independent study conducted by Businessmap warned about the declining reserve margin and the prospect of major price spikes in the event of a new build if the price determination methodology was not corrected. A report for

23 E.g. see BusinessMap report on Restructuring of Energy Sector, 2001
National Treasury noted that “prices would have to at least double” for any new build to be viable irrespective of which technology was chosen.24 The Minister of Public Enterprises at late as 2003 effectively interfered with the price determination process by stating that Eskom should not be allowed more than an inflation linked price increase in 2004.25 In addition, a portion of retained earnings in Eskom were paid out as dividends to the fiscus between 2003 and 2006. Such was the power of the liberalization ideology that the restructuring of the industry and the introduction of private producers became de-facto more important than the security of supply.

Eventually, in 2004, in recognition that the obligation to ensure security of supply practically still lay with Eskom, a compromise (and not particularly coherent) arrangement was reached where Eskom and the Regulator agreed that Eskom would be allowed to incur costs for new build on the basis that they are ring-fenced and may be transferred to an independent developer at any stage in the new build process. However, later in the year, a cabinet decision was made that Eskom would be government’s champion in the energy sector, that Eskom would be responsible for 70% of all future new builds and that no existing generating facilities would be privatized. On this basis, (arguably at least four years too late), Eskom commenced on an aggressive new build program involving (amongst a range of other investments) the construction of two 4800MW coal power stations.

The first obstacle faced by Eskom in the build program was the uncertain policy and regulatory environment, driven by political as well as economic considerations. In practice, the electricity price had not kept up with increasing costs of coal, the replacement cost for equipment and the need to provide an adequate return on assets to fund future investment. In addition, the regulatory formula based on historical cost of equipment exacerbated price spikes. Hence, the application of the regulatory rules in 2008, resulted in an Eskom application for a 62% price increase. Ultimately, Eskom got a 26% increase for three years, resulting in a major cash shortage that was only solved through a R60 billion subordinated loan from government and R230 billion of loan guarantees from the

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Treasury. The Regulatory uncertainty persists and, ultimately, it is only government ownership and support that has kept the build program viable.

The construction process for the two six pack coal power stations has not proceeded well and completion is way behind schedule which has undoubtedly put the power system under severe stress. However, while Eskom has made many mistakes in the construction and is significantly accountable for this state of affairs there are a number of extenuating circumstances that should be taken into account:

- Eskom has had to rebuild the capital projects capability almost from scratch – this resulted in a significant capability and capacity shortage, particularly in the early stages of the build program.
- Eskom commenced the new build under extreme pressure (given the deteriorating reserve margin situation) which resulted in inadequate up-front planning.
- Eskom implemented the build program within a highly uncertain regulatory environment which caused the company significant financial distress and created a delay in the construction of key modules of the second coal power station – indeed without major government financial support the build program would bankrupt the enterprise.
- The procurement process coincided with the peak of the global economic boom and associated high levels of power build in both developed and emerging economies which gave suppliers extremely high levels of market power.
- The global supplier community lost considerable expertise because of a period of minimal new build and have required high levels of Eskom over-sight at best and, in other instances, simply have not been able to deliver on their contractual commitments.
- It is recognized the utilities go through steep learning curves in the construction processes and costs and the time for construction can decrease by between 25% to 40% from the first construction to the fifth unit.
- Eskom has taken a range of initiatives to build it mega-project management capability including a comprehensive review of mistakes made, the
development of a unique tool-kit based on this review and the establishment of a Project Management Institute that can provide capacity building services to all SOC based on Eskom’s learnings.

By 2012, the electricity supply situation was on a knife edge. The reserve margin of dispatchable base load excluding half of available peaking capacity and minus unplanned outages was 2% (Figure Thirteen). The aging fleet (Figure Fourteen) had been running since 2004 beyond its design capability and planned maintenance had been deferred on many occasions since 2010 to keep the lights on. All of this resulted in an increase in unplanned outages to 9% since 2010 as the reliability of the plant has been compromised as a result of inadequate maintenance, beyond design utilisation and poor coal quality. In addition, Eskom is faced with the need to increase planned maintenance to make up for the period of “deferred” maintenance. Finally, Eskom is struggling to deliver maintenance processes on schedule due to capacity problems and additional problems that are discovered in the equipment in the course of the maintenance process.

In order to contain the situation without load-shedding, Eskom needs to employ the Open Cycle Gas Turbines extensively. This will have significant implications for Eskom’s financial sustainability. However, Eskom is unable to get certainty from the Regulator that these costs will be reimbursed. This suggests a problem with incentives as, in the absence of such certainty, Eskom is financially incentivized to load shed which causes much greater damage to the economy than the cost of OCGT utilisation.

**Figure Thirteen: The Reserve Margin Based on Dispatchable Energy and Unplanned Outages**
It is apparent that the governance system as it stands is not responding effectively to the challenges of an extremely tight power supply which is escalating the risks of unnecessary load-shedding. This needs to be corrected as a matter of urgency as the costs of uncertainty and load-shedding on the economy are extremely high. Consequently, it is necessary to review the governance arrangements in the electricity sector to put in place an appropriate balance between enabling private investment and leveraging Eskom’s
capabilities as the national energy champion. In other words, it is necessary to reform those elements of the system that reflect an ideological and impractical bias towards managed liberalization, so as to optimize the security of supply and efficiency of the system. This should be done through allocating implementation responsibility to where the strongest institutional capabilities are located to deliver on such responsibility.

Planning to Unlock Growth: The Transnet Market Demand Strategy

Transnet is the SOE responsible for rail, port and pipeline infrastructure and operations. Transnet has total assets valued in the range of US$20 billion and annual revenues of around US$5 billion. Transnet Freight Rail has over 20,000 km of rail and transports 210 million tons of cargo per year. The ports process just under 5 million containers per annum and 140 million tons of exported bulk cargo.

In 2004, under shareholder direction, Transnet commenced an infrastructure investment program. The initial plan was to invest R36 billion over five years, all off Transnet’s not particularly strong balance sheet. Over the next seven years, as Transnet’s balance sheet was consolidated and revenues increased (often on the back of price increases, rather than efficiency improvements) the five year investment plan grew to around R100 billion. However, the overwhelmingly bulk of this investment went into replacing capacity that had reached the end of its useful life, rather than creating new capacity to facilitate the growth of the economy. It is also notable, that the plan was adjusted downwards in 2008 and 2009 when Transnet revenues dropped as a result of the global recession. This had a strong pro-cyclical impact on the South African economy.

In 2011, in response to the DPE’s request to plan based on unlocking national economic growth, Transnet developed the Market Demand Strategy (MDS). The immediate consequence of the strategy was to increase the corporate planning period from five years to seven years and to increase the investment plan from around R110 billion (over five years) to R300 billion (over seven years). The plan was overwhelmingly going to be funded on balance sheet through increasing revenue by 16% per annum as a result of setting ambitious productivity
improvement targets which would increase profitability (Figure Fifteen and Sixteen). This would generate R213bn of the required funding while debt would cover the remaining R87bn. Two thirds of the plan was focused on increasing rail capacity that was proving to be the largest constraint on growth. Of note, is that 55% of the investment plan would result in the creation of qualitatively new capacity. By the end of the plan the coal export corridor capacity would increase from 68mt to 97.5mt and the iron ore corridor would increase from 52.8mt to 82.5mt. The manganese corridor would also have significant capacity growth from around 7mt to 12mt. Container handling capacity in the ports would increase from 4.3mn TEUs to 7.6mn TEUs.

**Figure Fifteen: Transnet Productivity Improvement Plan Illustration**

**Figure Sixteen: Transnet EBITDA from Revenue Growth and Productivity Improvement**

**EBITDA Margin (%)**

<table>
<thead>
<tr>
<th>Year</th>
<th>EBITDA Margin (%)</th>
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<tbody>
<tr>
<td>11/12</td>
<td>41.2</td>
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<tr>
<td>12/13</td>
<td>41.8</td>
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<tr>
<td>13/14</td>
<td>48.2</td>
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<td>14/15</td>
<td>50.9</td>
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<td>16/17</td>
<td>54.9</td>
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<tr>
<td>17/18</td>
<td>53.3</td>
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<tr>
<td>18/19</td>
<td>53.6</td>
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</table>
The MDS opened up the door for future private participation in the core rail and port logistics system through placing the “Durban dig out port” which would require an estimated R100bn investment on Transnet’s planning system. In the MDS, some provision was made at the margins for private participation in inland bulk terminals and in the operations of (marginal) branch rail lines, but this has yet to transpire.

At this point in time, Transnet has not achieved its productivity and revenue targets, for a range of reasons, some in management’s control and some beyond their control. However, the company has been able to sustain the momentum of the investment program and there is little doubt that the ambitious targets set by the MDS have resulted in a much greater sense of urgency and focus within the enterprise than was to be found in the decade prior to the release of the Strategy. Whether private sector funding (through customers or pension funds) will be required to supplement the balance sheet in order to deliver on the R300bn remains to be seen.

The Competitive Supplier Development Program

In 2004, Eskom and Transnet’s organizational culture and capabilities reflected South Africa’s peculiar history. The SOE had retained a strongly technical, rather than commercial culture and had relatively unsophisticated procurement organizations, with almost no experience of procuring as commercial organizations in a global economy. In turn the national supplier sector was significantly depleted, with an inward looking culture lacking in technological dynamism.

As a consequence of the implementation of the capital procurement process as a whole, and of the CSDP in particular, a number of key problems have emerged in relation to the SOE and the environment in which they operate. These include:

- A planning process that has a strong engineering bias towards customization rather than standardization which decreases procurement, operational and
maintenance economies of scale and radically increases the total life-time cost of the equipment.

- A short-term strategic and demand planning view driven by degraded balance sheets.
- Operational inefficiencies resulting in second guessing of investment plans instead of seeing the two areas as complementary. For example, investment plans were delayed because of the need to use existing assets more efficiently, rather than enhancing operational efficiencies whilst executing the investment plan.
- Institutional fragmentation within SOE resulting in incoherent or incomplete plans.
- Procurement execution that tends to have an engineering bias, resulting in overly detailed technical specifications which limit understanding of commercial trade-offs and often unnecessarily excludes national industry.
- Procurement execution and supplier relationship management tends to be transactional (rather than partnership orientated)
- Large procurement are often stop-start sometimes because of balance sheet uncertainties.
- SOE governance of procurements tends to be process orientated, rather than substantive, with limited rigorous and comprehensive content reviews resulting in sub-optimal procurement strategies and processes.

Given this background, when Eskom and Transnet announced their first major capital investment programs in 2004/5, the Department of Public Enterprises (DPE) with the Industrial Development Corporation modeled the impact of the build program on the national economy and on manufacturing in particular. This modeling exercise suggested that, given existing industry capacity and capability, approximately 40% of the build program would need to be imported. This created both a security of supply problem for the SOE (particularly in the context of a then over-heated and volatile global market) and a balance of payments constraint at a macro-economic level. In this context, the Department launched the Competitive Supplier Development Program to leverage the capital expenditure procurement to
create a platform for investment and capability building amongst the SOE capital goods supplier industries.

Annexure One provides a conceptual framework for understanding the relationship between procurement and investment by the supplier community in particular capabilities. It demonstrates how procurement leverage needs to be combined with different kinds of government intervention depending on the complexity of the industrial or technological capability that is being developed. The following section describes the initiatives that have been put in place by the DPE to leverage procurement to promote investment in intermediate and advanced capabilities. This will be followed by an assessment of the lessons learnt through this process and proposals for an additional series of interventions for the SOE, government and the private sector to qualitatively take the program to the next level.

In 2007, the DPE established the Competitive Supplier Development Program (CSDP) with the aim of promoting investment in, and enhancing the competitiveness of, SOE supplier industries so as to lower costs, decrease imports and enhance security of supply. The key focus of the program was to leverage the investment programs to promote investment in shallow and intermediate manufacturing capabilities. There were two fundamental challenges in introducing the program:

- There was no textbook methodology that could be followed in designing and delivering a supplier development program – it had to be structured as a learning by doing process from below.
- The SOE did not have the required capabilities to deliver the program – capabilities needed to be both supplemented and built in the process of delivering value.

Consequently, the Program was conceptualised in a phased manner, with the first phase focused on a learning by doing process at a transactional level. The second phase focused on building strategic partnerships with suppliers and the third on promoting national innovation (Figure Seventeen).
Figure Seventeen: Phases of the Supplier Development Program

<table>
<thead>
<tr>
<th>Phase One: Transactional Capabilities</th>
<th>Phase Two: Manufacturing Partnership Capabilities</th>
<th>Phase Three: Innovation Capabilities</th>
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<tbody>
<tr>
<td>• Optimisation of what is to be procured (to optimise capital, lifecycle cost, industrial impact).</td>
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<tr>
<td>• Methodology to define, contract and manage localisation requirements.</td>
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<tr>
<td>• Develop methodology for defining procurement process (how to procure).</td>
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<tr>
<td>• Strong contract management skills.</td>
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<tr>
<td>• Ability to identify key fleets and define long term fleet requirement.</td>
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<td></td>
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<tr>
<td>• Standardisation of methodology to ensure economies of scale.</td>
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<td></td>
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<tr>
<td>• Across government — enterprise coordination capability including long term funding strategy, definition of procurement vision and comprehensive government support for advanced manufacturing capabilities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identification of design capability vision.</td>
<td></td>
<td></td>
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<tr>
<td>• Structuring of design partnership.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Management of design technology transfers.</td>
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</tr>
</tbody>
</table>

- We are presently moving from phase one to phase two, although enterprise capability remains weak and very uneven.
- Continued focus on entrenching supplier development at a transactional level.
- Eskom is developing a complex procurement, project management and supplier development Body of Knowledge.

There were three pillars (Figure Eighteen) to the first phase of the program:

- Firstly, core to the program was to empower the SOE and make it accountable for the results delivered – consequently the first pillar of the program was empower the SOE and require that the enterprise produce a strategic Supplier Development Plan (SDP), based on a bottom up analysis of expenditure, of the state of the national supplier industry and of where opportunities for industry development are located. The plan needed to embody targets for increasing investment and national value add as a portion of the procurement program. Like all business plans produced by the SOE, they could be held responsible for delivery, as the targets were based on a management assessment of what is achievable. In contrast, it is not possible to hold an organization accountable for an imposed top-down target that is not necessarily based on detailed data and rigorous analysis. The focus of the CSDP was on shallow and intermediate capabilities as the development...
of these areas, whilst being dependent on the quality of procurement planning and execution, does not require any additional government incentive. Both Eskom and Transnet developed and published detailed Supplier Development Plans during 2008. Transnet did not provide targets as they argued that given that the organization had no experience, the targets would be arbitrary.

- The second pillar of the program involves “showing care from the top”. This required that the Minister (in particular) showed interest and support for the program whilst requiring accountability for delivery. This translated into sending a consistent message that the Program was politically important, economically strategic and one of the key reasons why the state owned the enterprise. In practice, there was a direct correlation between Ministerial interest in the program and SOE top management interest in the program.

- The program set an aspiration that the SOE did not have the capabilities to immediately deliver on. The third pillar of the program relates to providing additional support to help manage this gap. The DPE with Transnet and Eskom introduced comprehensive procurement skills development programs, procurement capability benchmarking, a supplier capability benchmarking program, the establishment of hubs for the development of specific components and industry research programs. In particular, the Department championed the holding of a series of highly intensive “boot camps” where the CSDP was explored very intensely over a seven to ten day period with a broad range of SOE personnel that were relevant to the program.
## Figure Eighteen: The Three Pillars of Learning by Doing

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<thead>
<tr>
<th>Bottom up execution:</th>
<th>Show care from the top:</th>
<th>Provide Support:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery organisation driven planning, implementation and learning (e.g. clear definition of projects, focus areas and targets.)</td>
<td>Hands-on top down accountability and dialogue (e.g. regular, substantive report-back meetings on progress and obstacles)</td>
<td>Put in place resources and enabling initiatives that enhance delivery (e.g. specialised skills development)</td>
</tr>
</tbody>
</table>

### Output of phase one: Learning about what works in practice!

In 2013, Eskom and Transnet released their second generation supplier development plans, broadly based on a planning framework developed by the DPE, in collaboration with the SOE. Annexure Two provides an overview of the logic of the framework.

Since 2008, procurement policies, processes and related systems have been revised to ensure that supplier development concerns are integrated into all significant procurements and supplier development related KPIs are now embedded in the shareholder compact. Thus far Eskom has leveraged commitments of over R1.366 billion in investment in manufacturing capacity by suppliers, R824 million of which has already been invested, with 40,000 jobs created in the process. Transnet has entered into contracts valued at R18.5 billion containing supplier development commitments of R8.5 billion, R4.8 billion of which has been delivered to date.

In March 2014, the winners of the first locomotive fleet procurement, involving the acquisition of 465 diesel and 599 electric locomotives, were announced. The procurement will cost in the region of R50 billion. The procurement will create a foundation for a sustained strategic partnership between Transnet and the chosen Original Equipment Manufacturers (OEM). Four OEMs were chosen, two for each
technology, to ensure that if one does not deliver, the volumes can be transferred to the other. The procurement will have the following developmental impacts:

- Almost triple the level of local content per locomotive produced in South Africa.
- Create R68 billion in localisation benefits for the South African economy.
- Develop qualitatively new and strategic manufacturing capabilities, which will ultimately support not only the locomotive industry but also the broader manufacturing sector.
- 28,000 indirect and direct South African jobs will be created.
- Promote South Africa as an export hub for locomotives into Africa.
- Energy savings will be achieved on the rail network, with 8-10% lower fuel consumption for diesels and 18% energy savings for electrics.

The strategic partnership will also result in OEMs implementing supplier development programs that go way beyond their direct relationship with Transnet and will involve developing the capabilities of South African manufacturers serving a range of sectors. One OEM as already launched a supplier development fund and “innovation centre” to support this process. The DPE, Department of Trade and Industry and Department of Science and Technology have established a coordinating committee to systematically support this process. In addition, the home governments of key OEM are now supporting the implementation of ambitious industrial development programs in South Africa as part of the process of building their relationship with what they now perceive as being a key trade and investment partner.

The biggest threat to the CSDP comes from a National Treasury (NT) preferential procurement policy which treats SOC in the same way as a remote, highly under-capacitated rural local government. The fundamental difference in approach between the DPE and the NT is the DPE’s philosophical position is that value for money from a procurement is a result of the rigor of the strategic sourcing process that is overseen through appropriate governance mechanisms that check for content as well as process. In other words, premiums come from badly defined functional and technical specifications and a poor procurement strategy. The NT philosophically
believes that premiums can be controlled through removing incentives for anything but lowest price with a small margin for empowerment.

A number of key lessons have been learnt relating to the role of the shareholder in overseeing the establishment of a supplier development program:

- Firstly, supplier development and localisation requires a holistic approach to a procurement re-engineering programme. As illustrated in the diagram below, the process begins with the enterprise systematically planning and setting supplier development and localisation targets. It then moves to addressing whether the enterprise has the necessary policies, processes and systems in place to enable and drive implementation. Next is determining and ensuring that the enterprise has the necessary capabilities and skills in place to implement the programme. Thereafter, it is critical to put in place a communication platform for internal and external stakeholders and to ensure that coordination takes place at all levels. The final link in the chain is monitoring and evaluation (Figure Nineteen).

**Figure Nineteen: The Continuous Reengineering and Improvement loop**

- Secondly, the Shareholder must give the enterprise a clear mandate to implement a programme, whilst having the responsibility of providing targeted
support and facilitating the building of an enabling policy environment. This requires a continuous dialogue with management about challenges faced by the programme and how the process can be enhanced. The shareholder has to help management build a bridge between the shareholder’s developmental aspirations and the reality of enterprise capability. This involves providing targeted practical support whilst also demanding accountability.

- Thirdly, there is no simple text-book methodology to leveraging procurement to develop suppliers - it is a continuous improvement “learning-by-doing” process. Learning-by-doing entails trying to find something that works operationally, rather than what sounds strategically elegant. However, building new sourcing capabilities to implement new operational methodologies is not a big bang – it is a step by step process. As the enterprise learns and develops new capabilities, it can take on more and more ambitious objectives with associated greater complexity and risks.

- Fourthly, is the quality and rigor of the planning, strategy formulation, execution and contract management processes that determine whether optimal life cycle value that is extracted from a procurement, regardless of whether the procurement contains supplier development requirements. Consequently, policy needs to focus on putting in place a comprehensive governance framework that manages the quality and rigor of the entire sourcing process from procurement strategy development to the contract management phase. This requires a mechanism (through a review process) to assess the quality of the content of each phase of the sourcing process as well a clear prescriptions for the processes that should be followed.

- There has been significant debate about premiums. It should be noted that SOE are in a unique position to drive a supplier development program as any premiums associated with a localization process can be recouped by the state through taxes without requiring customers to bear a downstream premium. Secondly, in practice, the empirical trend is for procurements with supplier development requirements to be benchmarked as cheaper than their predecessors as the drivers of premiums have more to do with the rigor of the strategic sourcing process, than the requirement for localization – although if the localization requirement is too ambitious there is little doubt that large premiums can be paid.
Finally, designing a procurement to achieve supplier development and localisation objectives requires that the entire strategic sourcing process be modified to take into account these objectives. This would include a review of both the functional and technical specifications to ensure that the product has been “designed for local” and is not being over-specified. In addition, standardisation of the demand requirement is critical to ensuring economies of scale. In each stage of the strategic sourcing process, specific criteria can be used to assess if supplier development concerns have been adequately integrated.

It is critical that the supplier development, localization and transformation process becomes more than an SOC practice, but part of a national movement of the way business is done in South Africa in order to optimise the national demand platform. To further this goal the DPE has taken a number of initiatives:

- A “knowledge forum” has been established involving all interested SOE (i.e. including those that don’t report to the DPE) so that the lessons that have been learnt and the capabilities that have been developed can be shared across organisations through both knowledge sharing, and at times, a more active organizational coaching and mentoring process.
- The DPE has hosted intensive training boot-camps for all SOE and government departments.
- A two day Summit was held where public and private stakeholders were invited and Eskom and Transnet shared their methodologies and plans.
- Introductory workshops are now being held with a broad range of government departments and agencies (including the large metropolitan government) as well as with large private sector companies in the mining sector.
- A joint supplier development fund has been established between Transnet, Anglo American and the Industrial Development Corporation with the objective of giving companies both funding and access to common capital goods requirements across the logistics and mining industries.

The Shareholder Management Model and Industrial Customers
In the South African context, there is a contradiction between enterprise level incentives and government objectives relating to emerging industrial sectors. Historically, the SOE were focused on supporting very large mining and processing customers. In the case of Transnet, for example, long distance bulk corridors are extremely profitable and are associated with relatively simple continuous processes. This plays into rail’s core competitive advantage over road in moving heavy, large volumes over long distances. The optimization of Transnet’s financial returns would lead to an over-whelming investment and operational focus on the mining sector. Yet, government’s industrial policy is focused on supporting emerging manufacturing industries that have a range of positive externalities, such as increasing returns to scale, stable prices and requiring a skilled stable labour force. These industries, such as automotive, are relatively small, require complex logistics processes, are not as profitable and can use road as an alternative mode of transport to rail. This creates a genuine dilemma, in that if the enterprise is to optimise its returns so as to fund the investment program, it should put its efforts into servicing the most profitable customers. The management of this dilemma requires special shareholder attention and oversight. The following will provide an example of different levels of shareholder intervention.

**Port Tariffs and Containers**

In 1994, South African port tariffs were determined by the value of the cargo being moved, rather than the volume. In other words, the tariff policy, particularly relating to cargo dues (that portion of the tariff that is supposed to go towards the funding of infrastructure) effectively got manufacturing industries to subsidise the mining sector. Although the tariff was reformed so that there was no longer a direct link between value and port price, the port costs to manufacturers remained extremely high (particularly when benchmarked to the global average) while the costs to the resources sector remained comparatively low (Figure Twenty). The situation was exacerbated because of an implicit internal subsidy between the ports and rail system, where the port monopoly pricing effectively under-wrote rail investment.
The reversal of this price distortion was an area of shareholder and Regulator agreement. Consequently, for the FY2012/13, the Transnet National Port Authority offered a once-off tariff discount of R1 billion to the local manufacturing industries for export of goods in containers and RORO units. This was followed by a reduction in cargo dues for FY2013/14 by 43.2% for full container exports, a 14.3% reduction for full container imports and a 21.1% reduction on motor vehicles exports.

**Transnet Service and the Automotive Sector**

The automotive sector is a priority sector for development in the Industrial Policy Action Plan through the Automotive Production and Development Programme – the sector development strategy involves providing incentives to both attract Original Equipment Manufacturers to invest in plant in South Africa and to encourage the development of manufacturing capabilities throughout the automotive supply chain. The Programme includes capital incentives and import rebates based on local
content and export performance, although these will be phased out over time. The sector is a strategic centre of manufacturing excellence in South Africa through the introduction of globally cutting edge manufacturing and supply chain management technologies.

The automotive industry has aspirations to more than double annual domestic vehicle production to 1.2 million vehicles by 2020 in order to get to 1% of global production. The South African automotive sector is suffering from a double locational disadvantage firstly resulting from the country’s relative isolation from world markets as well as the dispersed location of different OEMs and their suppliers within South Africa. This makes consolidating cargos across OEMs to achieve economies of scale particularly difficult.

The Minister of Public Enterprises launched the SOC-Automotive Competitiveness Forum on 20 September 2012 with the primary objective of:

- promoting collaboration between SOC and the automotive industry to ensure that infrastructure capacity and service delivery enhances competitiveness and to enable increased investment in both infrastructure and in the cluster as a whole;
- sending a clear signal to investors that SOC will be responsive to their needs within sensible commercial constraints; and
- enabling the identification of priority cluster infrastructure related projects that will be overseen by the Minister of Public Enterprises.

In response to this process, the Department of Public Enterprises conducted a study to determine the scale of problems and the kinds of interventions that would make a meaningful difference to the current situation. All OEMs were interviewed in the process. The key findings included that the logistics costs, particularly for those OEMs based inland, place the industry at a core disadvantage. However, the most fundamental challenge has been to provide the industry with a reliable and efficient rail service – train departure and arrival times are often late, at time considerably so. In addition, a significant portion of train capacity contractually booked by OEMs was not supplied by Transnet which increases costs, makes planning very difficult and puts results in increased cargoes on the road.
The Forum is exploring solutions to the following specific challenges to enhance the competitiveness of the sector:

1. How efficiency improvements can impact cost and some of this passed to the customer.
2. How can the automotive industry be supported through the shareholder requiring a lower return on assets (RoA) for the sector.
3. Can the National Treasury “allocate” carbon taxes to subsidise specialised automotive infrastructure as part of road to rail process with the associated carbon savings.
4. The industry to develop a dashboard which will provide the Minister with quarterly reports on SOC performance per OEM against their key KPIs – Transnet will have the opportunity to comment on the reports.
5. Industry to explore the viability of employing a “fourth party logistics provider” to optimise industry tactical and operational planning, partner Transnet in supporting operations and systematically monitor service delivery from all stakeholders.

**Port Based Industries versus Bulk Cargo Handling**

There is a similar logic pertaining to the development of port related industries (such as ship repair, boat building and oil and gas service hubs) versus the focus on developing the core cargo handling business, particularly related to the movement of bulk goods. The complexity, risk and short term return on investment is simply incomparable across these different activities, as illustrated in Figure Twenty One.
A joint task team made up of the DPE, the Department of Trade and Industry and the Transnet National Port Authority was convened to investigate opportunities for, and obstacles impeding, the development of port related industries.

The task team found that there is a large, growing and attractive markets in ship repair, specialized boat building and oil and gas services that is being inadequately captured by South African companies. Some of the issues that emerged resulting in the situation were:

- Despite the port authority charging relatively high rentals, the infrastructure required by these industries was in a poor state – sometimes as a result of the Transnet Group rationing investment capital to these sectors for areas giving a higher return.
- There was an acute shortage of specialist skills for the procurement of tenants for these sectors – the Authority was unable to understand the business drivers of these sectors to structure the relationship in an attractive way for investors.
• The procurement processes were extremely cumbersome and resulted in the enterprise being very unresponsive to market developments.

• There was no senior level champion focused on developing the sector – resulting in the market having no-one in particular to turn to with both problems and opportunities.

The Transnet National Port Authority is in the process of developing a comprehensive strategy for port industries based on this assessment. This strategy will make explicit the shareholder and other government support the Authority will require for the strategy to be implemented. The essence of the strategy is the definition of infrastructure capacity that needs to be provided at the port for these industries as well as the designation of a port space for cluster development.

Implications of Emerging Industrial Sectors for the Shareholder Management Model

Given the history of the SOC as supporting a resource based economy, there is an intrinsic tension between promoting emerging industrial sectors and SOC enterprise profitability, and consequently the SOC Return on Assets. This is exacerbated in the context of an aggressive build program where it will take time for new assets to generate a full return. In addition, the financial targets associated with shareholder compacts tend to be set at a high level, creating an over-whelming pressure for the SOC to focus on resource industries and where they will get the highest return at the lowest risk on any new investment. In the case of Transnet, responsiveness to industrial customers is further diluted by the system of capital being rationed at a Group level, based on achieving compact targets, rather than at a business unit level, where the customer voice may have some little resonance, despite the monopoly position of the enterprise.

There is a consequent need to adjust the core shareholder management model to include a specific process of developing targets associated with providing special support to emerging industrial sectors. Secondly, it is necessary to determine the impact on overall revenues and profitability of achieving developmental targets relating to emerging industrial sectors. Once this impact is understood, the high
level financial targets in the compact need to be adjusted to take into account the impact of the developmental targets. In the absence of such a process, in setting aggressive targets for investment and return on assets, the shareholder compact invariably undermines the ability of the SOC to support industrialization (Figure Twenty Two, Twenty Three).

**Figure Twenty Two: The Basic Shareholder Management Model**

**Figure Twenty Three: The Shareholder Management Model Including Industrial Customers**
Reflections on Shareholder Management of State Owned Enterprises

The recognition of SOE as developmental instruments by the state and the focus on ensuring that the enterprises are financially sustainable whilst optimizing their impact on customers and suppliers has clearly resulted in the SOE having considerable developmental impact. However, there are a number of areas where this impact can be enhanced:

- In some sectors, the investment programs have been limited to the SOE balance sheets which are ultimately not sufficient to unlock growth.
- Private funding from friendly institutional shareholders and customers has not been leveraged to accelerate investment.
- Efficiency improvements in some areas of SOE operations are extremely slow and little progress has been made in introducing the private sector to either establish an effective competitive dynamic or supplement SOE capabilities.
- There is a lack of sector and procurement policy alignment (and sector departmental practices) with the strategic intent of SOE (often because of a continued pre-occupation of introducing the private sector as the key strategic consideration) which creates a disenabling environment for the SOE.
- There remains a profound lack of alignment between the Department of Defence and the leveraging of defence SOE as a key industrial policy instrument which is limiting their growth and impact.

The biggest short-coming in the contemporary program is the lack of any coordinated developmental program involving the SOE, the mining and the resource processing sectors. The mining sector remains strategic to the South African economy. It constitutes 19% of GDP, 50% of exports, is responsible for the employment of 1,3 million people and pays over 17% of corporate taxes. It is extremely unlikely that there will be an industrialization process of anything like the scale of that experienced in the sixties and seventies without achieving a pragmatic alignment with these sectors. The SOE, with support from the shareholder, by virtue of their strategic position are in an ideal position to form developmental coalitions to align and mobilise targeted stakeholders behind strategic programs (Figure Twenty Four). For example, in the case of the mining sector...
industry, a coalition can be formed to support the growth of the sector through the provision of competitive infrastructure in exchange for:

- Investments in targeted strategic industrial capabilities.
- Support for the national skills development program.
- Systematic participation in the supplier development and localization program.

**Figure: Twenty Four**

**Shareholder Manager and SOE as Conveners of Developmental Coalitions**

In conclusion, in the context of driving ambitious developmental goals, the shareholder management role involves a number of dimensions:

- Overseeing the financial sustainability of the SOE through the core shareholder management model.
- Acting as a change manager to oversee and support the implementation of new developmental initiatives, particularly those requiring a learning by doing process.
• Acting as an overarching stakeholder relationship manager, with a particular focus on SOE suppliers, customers and communities impacted by SOE operations.

The focus of the change management and stakeholder relationship manager role overwhelmingly involves entering into a continuous dialogue with the SOE Boards and senior and middle management around achieving a spiritual or existential alignment. In other words, the extent to which the SOE management identify the achievement of a range of developmental goals as being core to their identity and role is more critical to successfully achieving these objectives than the imposition of any compliance system. The introduction of new developmental objectives requires a process of experimentation and risk taking and attempting to impose these objectives through an arms-length compact process can create a culture of cynicism between shareholder and enterprise. (See Figure Twenty Five). Consequently, there is a need for specific teams working with the SOE on new developmental objectives, that live, breathe and dream a different culture from those responsible for the core shareholder management model. The systemic integration of these objectives into the shareholder – enterprise relationship should be seen as a step by step negotiated process as management internalizes relevant developmental policies, practices and systems.
Annexure One: Procurement Leverage and Supplier Segmentation

The core of any procurement leverage strategy involves identifying those capabilities that are targeted for development and what interventions will be required to enable this. Supplier capabilities can be segmented into shallow, intermediate, advanced and globally leading. While there is no absolute categorization of these capabilities, as they are ultimately dependent on the level of development and scale of an economy, it is useful to provide an overarching framework as a point of reference. The key insight is that the development of each of these levels of capability will require different supporting interventions from the procuring organization and from government.

Leveraging Procurement in Shallow Capabilities

Shallow capabilities are capabilities related to construction and resource processing (e.g. run-of-the-mill steel production, cement). These capabilities are often associated with those areas where proximity to the build site provides a competitive advantage. In South Africa shallow localisation falls within existing industry capabilities, but may require significant increases in capacity in a range of core

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**Figure Twenty Five**

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<tr>
<th>Low</th>
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<tbody>
<tr>
<td>Low</td>
<td>Reluctant or creative enterprise compliance in relation to government objectives.</td>
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<tr>
<td>High</td>
<td>Management doing its own thing – no interest in government objectives.</td>
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**Spiritual Alignment**

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**Systems Alignment**

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<tbody>
<tr>
<td>Low</td>
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</tr>
<tr>
<td>High</td>
<td>Management doing its own thing – no interest in government objectives.</td>
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industries to meet the needs of major build programs – including construction, steel production and cement manufacture. Although research suggests that products requiring shallow capabilities are overwhelmingly procured from South African suppliers, there are a number of examples where this is not the case. This is often a result of poor planning and communication with suppliers whereby inadequate notice is given suppliers that the national demand will be forthcoming. The result is that national suppliers are unable to organise their existing capacity to meet the demand or to make investment in additional capacity.

Three possible initiatives can be taken to ensure that demand requiring shallow capabilities is captured:

- Providing the supplier community with a timely plan of major investments that will require significant quantities of inputs associated with shallow capabilities.
- Establishing a supplier association to enable communication about demand plans and supplier constraints so as to define scheduling and technical specifications in a manner that does not unnecessarily exclude national suppliers.
- Establishing a governance mechanism where enterprises report on their performance in relation to the procurement of products and services requiring shallow capabilities.

**Leveraging Procurement in Intermediate Industrial Capabilities**

Intermediate industrial capability involves the ability to manufacture components to more or less complex specifications – the development of these capabilities requires a clear medium-term procurement commitment. Building these capabilities requires significant upfront investment by business in plant, production technologies and processes, as well as in skills. Business perceptions of the stability of demand will thus be critical to the investment decision. In addition, from the start of the program, these capabilities need to be developed with the intention of accessing export markets. Hence, it is critical that the buyer facilitates long term sub-contracting relationships between the buyer’s tier one suppliers (usually global original equipment manufacturers) and companies with existing or potential intermediate manufacturing capability. Although the private sector will develop most of these capabilities off their own balance sheets based on security of demand, the adequate
supply of engineering and artisan skills is a pre-requisite for the sustainable development in these areas.

There is significant value to be captured through developing intermediate capabilities in South Africa. Research performed by Eskom suggested that although South African industry captured 90% of the value of procurements in the shallow capability area, only 16% of the value of intermediate capability requirements were produced in South Africa. This points to the critical role demand certainty and procurement capability play in developing industrial capability. As part of its Competitive Supplier Development Plan Eskom’s target is that within five years 60% of the value of intermediate capability procurements will be produced in South Africa.

The fundamental requirements for leveraging procurement to promote investment in intermediate capabilities include:

- Building the enterprise strategic procurement capability, particularly in relation to the optimisation of the life-cycle costs of major capital equipment. This should include a comprehensive skills development program as well as regular benchmarking of the procurement capability.
- Providing a strategic supplier development plan which includes a five to ten year demand projection for intermediate capability components that will be targeted for development through the procurement process.
- The systematic benchmarking of suppliers with existing or potential intermediate capabilities positioned to provide product and services to both the buyer and relevant original equipment manufacturer (OEM). The benchmarking provides the supplier with a global perspective of its capabilities resulting in a possible continuous improvement process and an objective mechanism to prove its competitiveness as part of the OEM supply chain.
- The ability to “match-make” between benchmarked suppliers and the OEM so as to integrate the supplier into the OEM’s global supply chain. This match-making can include targeted support from the OEM to the supplier to enhance areas of weakness identified by the benchmarking program.
- A mechanism to analyse the results of the benchmarking and communicate common areas of weakness across a range of companies so that a targeted intervention can be designed by government.
Leveraging Procurement in Advanced Industrial Capabilities

The development of advanced industrial capability involves large investments in plant and relatively complex technologies and skills. It involves the ability to absorb technologies and customise the design of intricate components for specific customer requirements. Developing these capabilities will involve a significant (and consequently risky) learning process, and is often associated with the ability to employ processes customised to esoteric or complex materials. The establishment of this capability will often involve a technology transfer as part of the procurement. Constant investment in research and development, both in manufacturing processes and in design improvements, is central to maintaining a competitive advanced manufacturing capability.

Given the scale and risk profile of the required investment, and the relative lack of sophistication of the broader cluster in South Africa, the private sector is unlikely to invest in this area without a comprehensive government support programme in specialised skills, research and development facilities and projects. It is also probable the private sector will require a government-linked equity partner, through a development finance institution. Procurement can be extremely complex with the selection of either a state owned or private national champion with exclusive rights for a period of time to produce a particular requirement. The basis for this exclusivity is to provide adequate scale to justify the required investment, to enable consolidation of scarce skills and other resources and to provide time for the company to move up the learning curve.

The development of advanced manufacturing capabilities can be a product of a centrally coordinated industry development program linked to a long term investment plan or it can be the result of a process targeted at developing a specific capability linked to a long term buyer requirement.
**Figure Twenty Six: Component Complexity and Intervention Matrix**

<table>
<thead>
<tr>
<th>Capability Complexity</th>
<th>Intervention requirements</th>
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<tbody>
<tr>
<td>Globally leading</td>
<td>Government driven investments for strategic economic purposes – not commercially viable in short-medium term</td>
</tr>
<tr>
<td>Advanced</td>
<td>Commercially viable but high complexity - government investment required in specialised skills and technologies to enable investment</td>
</tr>
<tr>
<td>Intermediate</td>
<td>Within capability of company balance sheets, but clear medium term commitment required plus adequate skills supply</td>
</tr>
<tr>
<td>Shallow</td>
<td>Within current industry capability. Sufficient notice required and information sharing to enable capacity expansion</td>
</tr>
</tbody>
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**Annexure Two: Supplier Development Planning Matrix**

**Figure Twenty Seven: Supplier Development Classification Matrix**

- **A** Programmatic
- **B** Focused
- **C** Small Enterprise Development
- **D** Not currently a focus area
Figure Twenty Seven defines different kinds of supplier development related procurement initiatives, based on three (3) criteria:

1. The **leverage value** of the transaction refers to transactions whereby the virtue of the scale, it allows the buying organisation the opportunity to negotiate supplier development initiatives in addition to the commercial terms of the purchase.

2. The **industrial leverage** refers to transactions whereby the nature of the purchase is such that the scale and the complexity of the item being purchased allows for local supply chain development around a particular industry, supported by the scale of the commercial purchase.

3. The **strategic importance** refers to the extent to which the product to be procured has an impact on the SOE’s core business.

The matrix is divided into four quadrants:

- **Quadrant A** refers to all strategic purchases. This quadrant can be further divided into programmatic and strategic transactions:

  **Programmatic transactions:** Transactions where the contracting period spans approximately five (5) years or longer; and is identified either in the IPAP or through other means as a strategic fleet. These transactions go beyond the normal business planning horizon and sometimes the funding capability of the SOC’s balance sheet. Extracing optimal value from these transactions requires collaboration between the buying organisation and government and can therefore be used to achieve industrialisation objectives or industrial diversification objectives due to their long-term nature. These transactions generally involves investment in plant, technology and skills in both intermediate and advanced capabilities (see Figure 1) to develop competitive advantage.

  **Strategic transactions:** Transactions with medium term contracting periods, which typically span a three (3) to five (5) year planning horizon. These transactions can therefore be used to achieve localisation objectives and have a significant impact on the SOC’s
ability to conduct business. Generally these transactions involve investment in *at least* plant, technology and/or skills in intermediate capabilities. Leveraging investment in advanced capabilities is possible with targeted government support.

- **Quadrant B** addresses all high value transactions with limited industrial leverage. These contracts could span short to medium term timeframes, but can still be leveraged to encourage supplier development. Therefore the focus is on investment in plant or technology or skills that enhance existing capability.

- **Quadrant C** refers to transactions that are typically of low value and have no industrial leverage, as it is characterised by low complexity goods and is subject to high competition in the local market. This focuses on socio-economic development concentrating on capability targeted toward previously disadvantaged individuals and communities.

- **Quadrant D** is currently not a focus area. This quadrant reflects commodities that have a low value leverage and high industrialisation opportunity, however are not feasible from a national competitiveness perspective.

Quadrants B and C tend to involve equipment transactions with lower complexities. These transactions therefore require less intervention support from government, but there remains a role for government facilitation.