ABSTRACT

Infrastructure development impacts directly on the economic growth and global competitiveness of a country. It is no secret that South Africa needs to drastically revitalise and expand its transport infrastructure, which is the focus of this paper, to keep up with economic growth and remain regionally competitive. To this end, the government and state-owned enterprises have made significant investment commitments and encouraging development plans are being drafted. But infrastructure development, especially as it affects national freight logistics systems, is not a one-sided affair. Communication, consultation, and collaboration between private industry and government right from conceptualisation through to implementation are imperative to ensure effective long-term infrastructure development. This, however, is no easy task as both parties have different agendas – and rightly so! This paper discusses current infrastructure development planning and to what degree private industry is engaged in this process in South Africa. It highlights the most commonly cited challenges and reports on some successful initiatives.

1 INTRODUCTION

Infrastructure in general, and transport infrastructure in particular, are critical requirements for the economic development and growth of a country. Kessides (1993) provides comprehensive evidence to illustrate the contribution of infrastructure to economic development. It is shown, inter alia, that infrastructure contributes through both supply and demand channels, reducing costs of production, contributing to the diversification of the economy, raising the quality of life by creating amenities, and contributing to the development of the economy where appropriate conditions exist.

The question remains whether infrastructure investment and creation alone can in fact generate economic growth. The World Bank (2013) has examined this aspect from different perspectives and recent research shows that for every 10% increase in infrastructure provision, there is an increase of approximately 1% in output over the long term. In addition, infrastructure quality improvement in developing countries accounts for 30% of the growth attributed to infrastructure. Obviously, the impact of infrastructure on growth varies by country. Egypt, for example, has over the last number of years experienced remarkable progress in the provision of infrastructure in all areas, including transportation (Loayza and Odawara, 2010). The status of its infrastructure now closely corresponds to what one would expect given its national income level. This study
suggests that an increase in infrastructure expenditure from 5 to 6% of gross domestic product would raise the annual per capita growth rate of gross domestic product by about 0.5 percentage points within a decade and by 1 percentage point by the third decade.

The South African government clearly recognises the critical importance of sufficient, adequate and modern infrastructure. This was evident from the State of the Nation Address of the President in February 2012 which focused almost entirely on infrastructure development (Zuma, 2012). Government has developed various plans, established various institutions and put structures in place to ensure proper implementation of these plans (see the next Section). In its most recent report on infrastructure, the DBSA (2012) talks about the “renewed focus on infrastructure development in South Africa”.

This tries to rectify the backlog that still remains after two decades of underinvestment between the early 1980s and early 2000s. Figure 1 shows public versus private spending on infrastructure as a percentage of the Gross Domestic Product (GDP). Public spending started to decrease in the late 1970s and apart from a small increase in the late 1990s, only started to increase again after 2005. In 2010, South Africa’s public-sector capital investment was 7.4% of GDP, while private-sector investment was 12.2% of GDP.

Figure 1: Public and private sector capital investment, 1962 – 2010 (National Treasury, 2012)

In 1998, the Moving South Africa (MSA) project delivered a transport strategy for the following 20 years to realise the vision in the 1996 White Paper on National Transport Policy, of integrated transport operations and infrastructure for freight and passengers, while meeting certain economic and social needs (Department of Transport, 1996). However, freight traffic grew much faster than anticipated and by 2005, it had exceeded the 20-year growth forecasts made by MSA, 14 years prematurely. MSA was followed by the National Freight Logistics Strategy (NFLS) in 2005, which focussed more on regulatory...
and institutional reform to ensure a more efficient freight system (Department of Transport, 2005). Nevertheless, implementation of the recommendations of the MSA and NFLS has been limited.

Subsequent to the NFLS, the National Transport Master Plan (NATMAP 2050) has been developed to establish a “dynamic, long-term and sustainable land use/multi-modal transportation systems framework” (Dyodo, 2011). The NATMAP 2050 vision includes “continuously upgrading infrastructure and services ahead of demand”. Between 2008 and 2010, Transnet invested R53bn in rail, ports and pipelines, while Government spent R70bn on national and provincial roads. Government and state enterprises are expected to allocate R262bn to transport and logistics infrastructure over the next three years (National Treasury, 2012).

The International Monetary Fund (2013) in its Economic Outlook Update projects that global growth will increase to 3.5% in 2013, which is indicative that economic conditions have been improving, even though modestly. The accelerated economic growth in emerging markets and the upturn in the USA were the main contributors towards this improvement. For South Africa the projected growth rate is 2.8% in 2013. This must be seen in comparison with a projected growth rate of 5.5% in emerging markets and developing economies as well as a projected growth rate of 5.8% in Sub-Saharan Africa as a whole. The emerging markets and developing countries are clearly capitalising much more on the more favourable economic climate worldwide. Many factors contribute to the projected slower growth rate in South Africa. However, South Africa is performing well in the logistics competitiveness area. Arvis et al (2012) did an analysis of the logistics performance of 155 countries and the Logistics Performance Index (LPI) for South Africa places it in position 23.

Policy and planning decisions emerge from politics, judgement and debate, not directly from empirical analysis. Hence, policy can be ‘data-resistant’, ‘evidence-proof’, contrary to best practices or infeasible with the available resources, due to crises, other commitments or even ideologies (Head 2008). Providing good infrastructure requires an active government – but one that is focused on activities best accomplished by governments, not those best left to the private sector (Partridge and Olfert, 2011). Hence, it is critical that policy and planning decisions proactively involve the private sector. In South Africa, there has been a trend towards funding transport infrastructure, especially the national roads, on a user-pays principle (Tuominen and Kanner, 2011). It is ludicrous to expect support from the paying user (in this discussion, private industry) if they have no part in the conceptualisation of strategies but are only invited to participate when the wallets need to come out (B Horne-Ferreira, 2013, pers comm, 10 January). However, it is not just a matter of employing the private sector as consultants: they also need to participate in decision making. Indeed, President Zuma has acknowledged that the South African business sector feels they are not being consulted by government (SAPA, 2013). The National Development Plan (National Planning Commission, 2011) makes extensive reference to the expectations and impositions of the plan on private industry, but only once states that “the government must treat private actors as partners in policy design and implementation”. At the same time the plan advocates that private industry should take ownership and “facilitate the realisation of national objectives”.

By necessity, private industry in South Africa – especially in transport and logistics – has developed a fiercely competitive spirit. This is clearly one of the primary reasons why in the midst of weak spatial governance and a lack of implementation from government, “spatial planning has tended to follow patterns set up by private sector investment”
One consequence of this might be that many of the spatial framework plans developed in South Africa in the late 1990s and early 2000s did not achieve their intentions and were very broad; did not understand or engage sufficiently with the actual spatial dynamics in cities; were poorly linked to infrastructure development; and were even contradicted by the actual development by both the public and private sectors (Todes et al., 2010). Further, this may also be one of the reasons why government agencies are reluctant to fling open the boardroom doors to these formidable role players who have the clout to manipulate development agendas for exclusive gain – should they so wish. Appreciating the history behind transport infrastructure development in South Africa and the resulting stereotypes projected onto government and private industry role-players is a critical starting point in bridging the communication and collaboration gap.

2 THE STATE OF SOUTH AFRICA’S TRANSPORT INFRASTRUCTURE

The National Development Plan states that “in effect, South Africa has missed a generation of capital investment in roads, rail, ports, electricity, water, sanitation, public transport and housing” (National Planning Commission, 2011). The South African Institute of Civil Engineering (SAICE) reflects this investment gap in its SAICE report card (2011) which focuses on “drawing the attention of government, and of the public at large, to the importance of maintenance, and to factors underlying the state of repair of infrastructure” in the country (Amod et al., 2011). The latest report card highlights the disparity in road conditions depending on the level of government authority responsible for its upkeep. On the rail side, heavy haul freight lines are well maintained and general freight lines show slight improvement, while branch networks are in a state of disrepair. Ports show steady improvement and are reported to be fairly well-maintained. Lastly, ACSA provides world-class aviation infrastructure at most of the airports under its jurisdiction. However, the question remains whether South African transport infrastructure will meet transport demand in the future? This depends on the relevance and quality of future development plans and South Africa’s ability to execute these plans in time – not on the efficacy of its infrastructure maintenance plans.

The National Planning Commission’s Diagnostic Report (2011a), released in June 2011, set out South Africa’s achievements and shortcomings since 1994. It identified a failure to implement policies and an absence of broad partnerships as the main reasons for slow progress. The Commission’s National Development Plan (2011b), published in November 2011, focuses on infrastructure as a major enabler for economic development in the future. This includes the transport sector and it is envisaged that by 2030, investment in the transport sector will ensure that it serves as a key driver in empowering South Africa and its people. The Plan is in line with the new growth path launched by the South African government towards the end of 2010 that will place employment at the centre of government economic policy (South Africa, 2010). Infrastructure is identified as one of the six key sectors for unlocking employment “through the massive expansion of transport, energy, water, communications capacity and housing, underpinned by a strong focus on domestic industry to supply the components for the build-programmes”. The plan does acknowledge the need for government to partner with business and labour. This is in line with new thinking in Europe, Canada (“the national transport policy focuses on public-private cooperation in the development of the national transport system”) and Australia (“the importance of public-private cooperation is also emphasized”) (Tuominen and Kanner, 2011).
Government has established several institutions to strengthen state capacity for infrastructure delivery. These include (DBSA, 2012):

- The Department of Performance Monitoring and Evaluation in the Presidency, tasked with facilitating delivery agreements for all infrastructure departments and monitoring their implementation;
- The National Planning Commission, located in the Presidency, tasked with developing a long-term vision and a strategic plan for South Africa, alongside advising Cabinet on cross-cutting issues that impact on South Africa’s long-term development. Infrastructure is one of the key issues addressed by the commission;
- The newly created Presidential Infrastructure Coordination Commission headed by the President, that will coordinate and oversee the implementation of strategic infrastructure projects that stimulate social and economic growth, and
- The Presidential Review Committee on State-Owned Enterprises (SOEs) that aims to align SOEs with the government’s development agenda, including that of infrastructure development.

The funds that are allocated for infrastructure developments are substantial. Over the Medium-Term Expenditure Framework (MTEF) period, i.e. 2012/13—2014/15, public-sector project estimates total R844.5bn. With public debt being less than 36% of GDP and external debt about 16% of GDP (De Klerk, 2013), there is the fiscal capacity to take on such investments. The economic infrastructure of rail, ports, roads, electricity, water and telecommunications constitutes a substantial proportion (80%) of estimated future infrastructure spend. The very ambitious Market Demand Strategy (MDS, 2012) of Transnet entails an investment, over the next seven years, of R300bn in capital projects. Of this amount, R200bn is allocated to rail projects and the majority of the balance, to projects in the ports. One of the main objectives of the MDS is to attract freight back from road to rail.

The Infrastructure Plan that emanated from the State of the Nation Address (Zuma, 2012) provides the background to Cabinet’s decision to establish the Presidential Infrastructure Coordinating Commission (PICC) to integrate and coordinate the long-term infrastructure establishment with its supporting management structures. Eighteen Strategic Integrated Projects (SIPs) have been developed and approved to support economic development and address service delivery in the poorest provinces. Each SIP is comprised of a large number of specific infrastructure components and programmes (PICC, 2012). Seven SIPs include a sizeable transport infrastructure component, namely:

- SIP 1: Unlocking the Northern Mineral Belt with Waterberg as the Catalyst;
- SIP 2: Durban – Free State – Gauteng Logistics and Industrial Corridor;
- SIP 3: South Eastern node and corridor development;
- SIP 4: Unlocking economic opportunities in the NW province;
- SIP 5: Saldanha – Northern Cape Development Corridor;
- SIP 11: Agri-logistics and rural infrastructure, and
- SIP 17: Regional Integration for African cooperation and development.

Each one of these SIPs is managed by a State-Owned Enterprise or State Agency (Maake, 2012). No reference is made to any private sector involvement in these SIPs; however, the Minister of Economic Development did indicate that the private sector was requested to provide inputs regarding these infrastructure plans. It is clear that the Government is serious about improving the country’s infrastructure, but it is unrealistic to
expect that they will be able to fund all the infrastructure development needs. In order to address this challenge, it is necessary to attract new investors.

There is almost no comparison between the transport infrastructures in South Africa and that in the rest of Africa, with South Africa in the top 40% of the world's countries in terms of air, road and railway systems (De Klerk, 2013). The recently announced National Infrastructure Plan of Government should be applauded. As is the trend elsewhere in the world, private sector is recognised as a major player in the planning, provision (especially funding), building and managing of infrastructure, but it is time that this well-identified need becomes a reality in the country.

3 THE JOINT RESPONSIBILITY OF PUBLIC AND PRIVATE ROLE-PLAYERS

It is ironic that in most countries the following situation prevails even today, especially in the freight logistics sector, that “while the private sector is largely responsible for developing and managing the nation’s freight flow system, public agencies at all levels face important investment and policy decisions that may affect these flows” (Cambridge Systematics and GeoStats, 2010). Kostianen and Linkama (2011) confirm this in analysing infrastructure development in Finland over the past number of decades. They state “decisions have been made regarding major infrastructure investments, and the end users, or people and companies, have been excluded almost completely from planning and decision making”. The same realisation is arrived at in India in a report (McKinsey, 2010) that promotes strongly the development of a National Integrated Logistics Policy. It argues “that the time is right for all stakeholders – policy makers, regulators, public and private providers, resource holders, equipment providers, financiers and end users – to act in concert to build the country’s future”. In South Africa (see Section 2), both the National Growth Plan and the National Development Plan state clearly that this should also happen in South Africa. There should be a common programme that everyone ought to work towards while stronger leadership from society is encouraged to work together to solve problems. Government and Private Sector should take joint responsibility for this.

There are examples elsewhere in the world where the private sector is involved closely with transport infrastructure development. In Canada “the national (transport) system is a vast array of inter-connected public and private sector institutions, organizations, and installations”, in addition, “the private sector has a bigger role as it owns and operates significant infrastructure including railways, ports, airports, and in some cases, highways” (Westac, 2008). In the USA, freight railroads, which are privately owned companies, will spend $23bn on upgrading the railroad infrastructure in the coming year and it will cost the government nothing (Grunwald, 2012). Obviously situations differ in different countries but it is time that innovative means are worked out for infrastructure development and funding and the private sector’s involvement is critical.

It is unanimously agreed that without collaboration and communication between public and private role-players the ambitious development plans relating to South African (and even regional) transport infrastructure will remain only that – ambitious plans. Why then is it so challenging to affect this collaboration, not only in South Africa but around the world? Much can be explained by recognising that these two parties have, at their core, differing objectives. Government is essentially the custodian and regulator of infrastructure, driving inclusive, equitable economic development, while industry is the user of infrastructure aspiring to drive exclusive growth through competition, thereby fuelling the economy.
This difference in perspective is duly underlined by responses from freight logistics companies in Gauteng identifying their most significant (and notably operational and shorter-term) barriers to efficient and effective logistics (CSIR, 2012):

- Insufficient road infrastructure and ongoing road works which lead to congestion;
- Severe skills shortage in the general logistics area;
- The impact of e-tolling and high rates and taxes levied on warehouse facilities. Private sector feels that the (high) corporate taxes already paid by companies should be used for the provision of infrastructure and that no additional taxes should be required;
- Dysfunctional traffic lights, potholes, the poor condition of secondary roads etc, resulting from insufficient maintenance;
- Inefficiencies in container depots, inaccessibility of logistics areas by heavy vehicles, insufficient provision for heavy vehicle parking in urban areas, and
- Security concerns and general lack of law enforcement.

This operational view customary of private sector role-players should be regarded as a strength brought to the collaboration table. The long-term, inclusive, broad-based development plans crafted (primarily) by government require this culture of action and pursuit of short- to medium-term rewards. But this does not imply that the private sector can be excluded from the visionary long-term conceptualisation phase. Recent commitment from the freight industry in sponsoring national research to support decision making in the industry shows its appreciation, understanding and commitment to the long-term plan. Appreciating the key differences in perspectives and strengths is essential. Collaboration initiatives should not seek to mould the other party to “become like us”, but rather to find a way to move forward with due respect for differing objectives and responsibilities.

4 BRIDGING THE GAP

Based on literature and the experiences and industry interactions of the authors, the following impediments to bridging the gap between private industry and government in infrastructure development planning have been identified:

- A legacy of mistrust, poor perceptions and political divides between government and the private sector, and even between different spheres of government;
- Lack of communication and collaboration. The current deadlock around the e-toll system in Gauteng is a prime example of this and could have been avoided through, inter alia, proper and close communication and cooperation;
- Critical skills shortage and the lack of institutional memory in government agencies;
- Political agendas and organisational barriers;
- Widespread corruption, especially, with regard to infrastructure projects;
- The lack of joint planning to develop a joint vision and a subsequent lack of joint accountability to implement plans, and
- The non-existence, of sufficient, current and reliable transport and freight data for use in informed planning and decision-making, coupled with the reluctance of some organisations to share their data because of the perceived commercial sensitivity of the data.

Nevertheless, there are encouraging examples of initiatives that have made progress along the long and winding road of communication and collaboration. The Transport Forum is an example of a platform that brings together industry, academia and notably Transnet and the Department of Transport during free and open monthly meetings to
share information and research and openly discuss relevant issues. The success of the forum is indicative of private sector’s desire to become more involved, but is also one-dimensional. While it is a good mechanism for content sharing and discussion, it has no clout in driving collaboration *per se* (H Van Huyssteen, 2013, pers comm, 15 January; t-systems, 2013).

In addition, the National Planning Commission is a good example of where the private and public sectors worked together to develop a joint plan – the people on the Commission were selected based on their expertise and experience, not because of their political affiliation and this was evidenced in their ruthless evaluation of the problems in the country.

Importantly, no single initiative can simultaneously address the impediments to collaboration on all fronts. The Transport Forum and similar initiatives have a specific purpose in terms of content dissemination and discussion, while the National Planning Commission brought together the role-players to think and plan. Unfortunately, the absence of success stories of initiatives that profitably brought together government and private industry to jointly *implement* these large-scale plans and *act* upon disseminated information is striking. The uphill battle fought by the Maputo Logistics Corridor Initiative (MCLI) since 1996 is an example where the practical, operational support from government agencies required to successfully launch an initiative with public support from government simply was not there (B Horne-Ferreira, 2013, pers comm, 10 January).

5 CONCLUSION

It is widely acknowledged that South Africa needs to drastically revitalize and expand its transport infrastructure. Significant investment commitments have been made, however, the development of policies and planning needs requires the involvement of all spheres of government and the private sector – particularly as they all have different priorities. Worldwide there is a growing recognition of the private sector being an important player and the value it can contribute. We have discussed here current infrastructure development planning and the extent of private sector involvement. We have highlighted common challenges, such as the need for quality data to assist proper decision-making. We have also reported on some successful initiatives, such as the Transportation Forum, where different role-players can discuss issues openly and freely, with no-one being threatened in whatever way.

We believe that the issues raised in this paper are critical for a sufficient, cost-effective, reliable and modern transport infrastructure in the country to meet the needs and demand in the future.

6 REFERENCES


and Its Indicators. International Trade Department, The World Bank, Washington DC, USA.


