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Evaluating South African environmental impact assessment (EIA) processes in the context of the Gautrain Project

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Evaluating South African Environmental Impact Assessment (EIA) processes in the Context of the Gautrain Project

Dissertation submitted in fulfilment of the requirements of the Master of Laws degree (LLM) in the School of Law, Faculty of Commerce, Law and Management.

Submitted by: Catherine Lorna Warburton

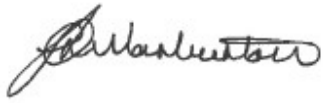
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DECLARATION

I, Catherine Lorna Warburton, declare that this dissertation is my own unaided work. It is submitted in fulfilment of the requirements for the degree of Master of Law (by dissertation) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.



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Signature

ABSTRACT

This study analysed key elements of South African environmental impact assessment (EIA) statutory requirements through the lens of the Gautrain Project EIA. It identified alternative possible approaches to the EIA process for future infrastructure development projects. The EIA process components that are covered in the research are the responsibilities of the applicant, the Scoping Process, the Impact Assessment Process - including public participation and amendment processes, and the Environmental Management Plan (EMP) process. The requirements for these key components of the EIA process are identified and analysed, taking into account the EIA regulatory developments from 1997 to the current 2010 regulations. The EIA processes followed for the Gautrain Project are researched and analysed to identify process related flaws and deficiencies. It was found that the current application of the EIA requirements to large infrastructure development projects, such as the Gautrain Project, is unwieldy, costly and protracted and does not result in a comprehensive assessment of the impacts of these projects at the appropriate time – that is, when the project design has been finalised. The EIA process as currently legislated does not allow for an adaptable phased process approach. The Amendment Application and EMP process cannot cure this flaw, as was attempted in the Gautrain EIA process. A key finding is that in these infrastructure development projects, detailed data on potential impacts is only known at the stage of detailed design. At the stage of final design impact assessment should be conducted by the party that will ultimately carry the risk of and responsibility for the construction of the infrastructure. This could be achieved by allowing for an 'in principle decision' between scoping and the detailed EIA stage for the appointed Concessionaire, to proceed with detailed impact assessment, once it has further progressed its designs. The proposed approach in the recently tabled Infrastructure Development Bill is analysed and criticized. The incorporation of Strategic Environmental Assessment (SEA) in order to plan, streamline and focus the EIA process for infrastructure development projects is highly recommended.

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LIST OF ABBREVIATIONS

BID	Background Information Document
BRT	Bus Rapid Transit
CoJ	City of Johannesburg
DEA	Department of Environmental Affairs
DEAT	Department of Environmental Affairs and Tourism
DF EMP	Draft Final Environmental Management Plan
DWA	Department of Water Affairs
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECA	Environment Conservation Act 73 of 1989
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMF	Environmental Management Framework
EMP	Environmental Management Plan
ERE	Environmental Resource Economics
GDACE	Gauteng Department of Agriculture, Conservation and Environment
GDARD	Gauteng Department of Agriculture and Rural Development
GDPTRW/Gautrans	Gauteng Department of Public Transport, Roads and Works
GDRT	Gauteng Department of Roads and Transport
GG	Government Gazette
GN R	Government Notice Regulation
HIA	Heritage Impact Assessment
I&APs	Interested & Affected Parties
IEM	Integrated Environmental Management
MEC	Member of Executive Council
MLPORA	Muckleneuk/Lukasrand Property Owners and Residents Association
NEMA	National Environmental Management Act 107 of 1998
O&M EMP	Operations & Maintenance Environmental Management Plan
PELJ	Potchefstroom Environmental Law Journal
PFMA	Public Finance Management Act 1 of 1999
Project RoD	The Revised Record of Decision for the Gautrain Project issued by the MEC after the Appeal Process on 25 April 2004
PPP	Public Private Partnership
RoD	Record of Decision
SAJELP	South African Journal of Environmental Law and Policy
SEA	Strategic Environmental Assessment

SIPs	Strategic Infrastructure Projects
SALJ	South African Law Journal
weCARE	Centurion Association for a Reasonable Environment

1. Introduction

1.1 The Research problem and background to the study

This study analyses key elements of South African environmental impact assessment (EIA) statutory requirements through the lens of the Gautrain Project. The analysis focuses on selected key aspects of the EIA process which require more thorough analysis and which provide the greatest opportunities for learning in the context of the Gautrain EIA. The key selected aspects of the EIA process which are investigated are – the Applicant for EIAs; the Scoping Process; the Impact Assessment Process and the Environmental Management Plan[1] (EMP) Process. The public participation process and the EMP process for the Gautrain Project was discussed in some detail in a key decision of the Full Bench of the North Gauteng High Court (then the Transvaal Provincial Division)[2] and the judgment provides fertile ground for analysis of the public participation process and the EMP process. Strategic Environmental Assessment (SEA) is identified as an environmental assessment tool which, although it is not required in terms of South African legislation, would enhance the assessment of large infrastructure projects by providing better planning and greater focus for the EIA.

Relevant information on the Gautrain EIA process is explained in Chapter 3 to provide the context for the explanation of the EIA processes employed and their shortcomings. The EIA processes and outcomes are analysed in order to identify flaws or gaps associated with the processes. Legislative requirements and developments on key EIA issues such as changes to the Scoping process and the evolution of EMP requirements, are analysed in light of the Gautrain

[1] The term Environmental Management Plan (EMP) is used in this study, as this is the term used in the Gautrain Project RoD, notwithstanding the fact that EMPs are also called Environmental Management Programmes. The explanation of these two terms is contained in section 2.5 below.

[2] *Muckleneuk/Lukasrand Property Owners and Residents Association v The MEC: Department of Agriculture Conservation and Environment, Gauteng Provincial Government and others (unreported)* (28192/04; 12137/06 TPD) [2006] ZAGPHC 86 (30 August 2006) (hereafter the *MLPORA* case).

EIA process and tracked from the start of the Gautrain project EIA in 2001 to the commencement of full operation of the project in 2012. This requires a review and analysis of a broad suite of environmental statutory requirements as they have metamorphosed over time, in Chapter 2.

The study assesses whether it is legally possible and appropriate for the rights and obligations of the applicant to be transferred. It considers the significance of the identity of the applicant. The value of expanding and elevating the Scoping process in order to provide greater direction to the impact assessment is explored. The focus of the investigation on the impact assessment phase is on the timing of impact assessment in relation to the progressive design development. The proliferation of amendment applications in the Gautrain EIA is analysed in the same context. The implications of the timing of EIA on the adequacy of public participation are reviewed and the statutory requirements for public participation are analysed with reference to the Gautrain public participation process to identify statutory shortcomings. The requirements for and role of the EMP process specified in the Gautrain Record of Decision (RoD) conditions, when there were no statutory requirements for EMP in place, are considered. The RoD conditions aimed to use the EMP process to supplement the impact assessment process and the wisdom of this approach is assessed. The potential use of Strategic Environmental Assessment (SEA)[3] to alleviate certain of the process flaws identified in the Gautrain EIA process is explored in Chapter 4 and carried forward to the conclusions and recommendations section. The government has introduced the Infrastructure Development Bill[4] to address the speed of delivery of infrastructure development projects. Chapter 4 contains a critique of this Bill.

[3] SEA is also an environmental assessment tool but it focuses on environmental assessment at a more strategic planning level. See section 4.2 below.

[4] The Bill was initially published in GG 36143 of 8 February 2013 for comment. A revised Bill was then published on 30 October 2013 in GG 36980 just prior to being submitted to Parliament for consideration.

The writer critically analyses and assesses the efficacy of the statutory requirements applicable to the abovementioned key elements of the EIA process, in the context of the Gautrain Project, in order to distil lessons learnt which may potentially be applied to similar projects in future.

1.1.1 The Gautrain Project and EIA Process

The Gautrain Rapid Rail Link Project links central Johannesburg, Pretoria, Sandton, Midrand, Centurion, Marlboro and Rosebank in Gauteng with the OR Tambo International Airport, and includes over 80kms of railway line.[5] It has been hailed as one of South Africa's most significant large-scale transportation infrastructure development projects and is Africa's first rapid rail link project. The Project is one of the largest infrastructure development Public Private Partnerships (PPPs) in South Africa to date.

Phase 1 of the project, consisting of the linking of the Sandton Station to the OR Tambo International Airport with a short underground section and stations at Marlboro and Rhodesfield was opened in time for South Africa's hosting of the Soccer World Cup on 8 June 2010. Thereafter, a second phase was opened on 2 August 2011 consisting of the Sandton Station to Rosebank Station link and the Rosebank to Hatfield, Pretoria section opening stations at Midrand, Centurion, Pretoria Central and Hatfield. As was reported in the press, there were challenges relating to water management and in particular water ingress into the tunnel section from Rosebank Station to Park Station in Central Johannesburg. These challenges caused delays and thus this section of the Gautrain rail link was only opened on 7 June 2012. This date heralded the completion of the full 80 kms of alignment and the opening of all 10 stations.

[5] Gautrain Project Record of Decision (RoD) dated 25 April 2004 para 1.

An environmental impact assessment (EIA) process was implemented in multiple phases. The phases of these processes were however not aligned with the phases of the rail alignment as it was opened for operation.

The EIA commenced in late 2000 and a revised Project Record of the Decision was issued on 25 April 2004 (the Project RoD) for the entire 80km route alignment. After the preferred Bidder was selected in mid-2005, further EIA work continued until 2008 due to design and construction-related changes. This resulted in about 6 years of EIA work for the Project. These further assessments were conducted on specific dissected sections of the project and most of the design changes were authorised as amendments to the Project RoD. The EMP process was dictated by detailed provisions in the Project RoD, devised by the regulatory authority to assist to 'fill the gap' in so far as limited information was available on potential impacts and necessary mitigation measures, at the time the Project RoD was issued.[6]

The Gautrain route alignment description in the April 2004 RoD was amended more than 13 times by 13 separate RoDs from 2004 to 2009 without a new composite route alignment for the entire project being published pursuant to the EIA process. Preliminary designs were published in the Government Gazette in terms of the Gauteng Transport Infrastructure Act 8 of 2001. However, these were changed and re-published a number of times in respect of various sections of the alignment. By the end of 2008 almost the whole 80km route had been altered from that authorised in the Project RoD in 2004. The resulting plethora of amendments to the Record of Decision covering discrete sections of the alignment made it difficult for even the regulatory authorities to keep track of the development of the system and what was authorized in the various areas over the years. Many I&APs were confounded by the extent of changes and fatigued by the on-going consultation processes. The Project RoD of 25 April 2004 incorporated

[6] Paragraph 3.3.3 of the Gautrain Project Record of Decision (RoD) issued on 25 April 2004.

detailed EMP requirements[7] in an attempt to remedy a flaw in the EIA project, that is the EIA studies did not include detailed impact prediction and mitigation measures, due to the unavailability of information at that stage on issues such as the nature of the rolling stock, detailed design and final construction methods. The process was challenged in *Muckleneuk/Lukasrand Property Owners and Residents Association v The MEC: Department of Agriculture Conservation and Environment, Gauteng Provincial Government and others*.[8] The court held that the RoD was conditional and that the EMP process would effectively supplement the impact assessment process. It is argued that the process-related challenges in the Gautrain EIA were not remedied by the EMP process, as was required by the Project RoD and supported by the High Court since the purpose of EMP is not to assist with the identification of impacts and mitigation measures.

The causes of the unduly lengthy, costly and confusing EIA process need to be uncovered and analysed in order to avoid a repetition of this in future.

1.2 Statement of the Problem

The application of the current EIA regulations to large infrastructure development projects, such as the Gautrain Project, is unwieldy, costly and protracted and does not result in a comprehensive assessment of the impacts of these projects at the appropriate time – that is, when the project design has been finalized. It is not appropriate to confine EIA to the planning phase of the project and EIA cannot be supplemented in the EMP phase of the project. Furthermore, a dichotomy often exists in these projects between the holder of the authorization (the applicant), and the party who is contractually responsible for environmental compliance on site (usually the

[7] Ibid.
[8] *MLPORA* case op cit note 2.

Concessionaire).[9] This is likely to lead to confusion in the mind of the regulator and disputes between the parties. The EIA process as currently legislated does not allow for a phased process approach, where impacts and mitigation measures may be assessed by the appropriate party or applicant, at the most appropriate stage of the project when all of the necessary information is available to share with stakeholders and Interested and Affected Parties (I&APs).

The potential of the Scoping process to guide the impact assessment process is being under-utilised. Weak regulatory provisions on the incorporation of I&AP comments into the assessment process, limit the efficacy of the EIA process to achieve its avowed objective of integrated environmental management. The achievement of this objective requires the integration of the National Environmental Management Act (NEMA) section 2 principles into the assessment process.[10] The SEA process proffers a valuable mechanism that could assist to focus the EIA process better and lead to more effective and efficient EIA processes, especially for large infrastructure development projects. However, there is currently no statutory provision for SEA in South African legislation.

In summary, these shortfalls are borne from incongruences between authorisations and project design, between regulatory compliance responsibility and contractual obligations, and between planning and implementation. Ultimately these incongruences undermine the objective of integrated environmental management in the assessment and the implementation of large infrastructure development projects.

[9] The Gautrain Project RoD made the Gauteng Provincial Government responsible for compliance with all environmental authorisations. However, in the Concession Agreement the Provincial Government had delegated this responsibility to the Concessionaire.

[10] Section 23(2) of the National Environmental Management Act 107 of 1998 (NEMA). The NEMA section principles are discussed in Chapter 2 and have sustainable development as an overarching objective. The principle of sustainable development is explained in further detail in note 51 below.

1.3 Purpose of the study

The purpose of this study is to evaluate South African statutory EIA processes through the study of the flaws encountered in the Gautrain EIA processes, which could facilitate a more legally appropriate and efficient EIA process, in harmony with the objectives of integrated environmental management, for these kinds of infrastructure development projects in South Africa in future. The lessons learnt are intended to guide improvements to the EIA process and legal requirements in South Africa.

1.4 Significance of the Study

This study is of particular importance in South Africa at this juncture where government is routinely engaging in extensive infrastructure development projects through PPP to stimulate the economy, create employment and provide much needed new or upgraded infrastructure, whilst minimizing the debt and risk burden for government. Furthermore, it is recognised that these projects may have major impacts on the environment.

The Department of Environment Affairs (DEA) has been and currently is reviewing the efficacy of the EIA process and in a recent strategy document recognised weaknesses in the process.[11] At the same time another arm of government, the Economic Development Department, has proposed the Infrastructure Development Bill[12] which appears to undermine the Integrated Environmental Management (IEM) process and the incorporation of sustainability

[11] DEA Strategy Document *Environmental Impact Assessment and Management Strategy* 31 October 2013. See the Executive Summary for a list of the weaknesses identified and the desired future state for an Integrated Environmental Management (IEM) system especially at p18. Two of the nine root causes of the 'limited success of the current IEM system in achieving sustainability' which are of particular relevance to this study are cited as 'the lack of internalisation of NEMA principles and the principles of sustainability' and 'lack of effective public participation and appreciation for public participation as a process that adds value to IEM'.

[12] Infrastructure Development Bill op cit note 4.

considerations. This is reflective of a tension between sustainability and development at government level.

Government is also considering extensions to the Gautrain system in future years, among other big infrastructure projects. It is therefore an appropriate time to consider whether any changes in approach are required for projects of this nature. Despite several revisions of the EIA regulatory framework and process by the government, it is becoming evident that the current 'one size fits all' set of EIA regulations is not appropriate for all projects.[13] We are facing new challenges in the South African EIA process as more complex projects, such as the Gautrain Project, are being presented as the current EIA regime is being implemented. Numerous environmental authorisations, such as those for the new power plants Medupi and Kusile and CoAl of Africa's Vele mine in Limpopo,[14] have required multiple amendments in response to design changes over the course of the development of the projects and occasionally flawed processes. At the planning and design stages of a project, when the EIA process is being conducted, there is often incomplete information and knowledge of the real impacts and required mitigation measures. Government is currently considering[15] the usefulness of SEA as a broader assessment mechanism to augment and guide the project specific environmental assessment of infrastructure development projects and this study supports the application of SEA to these projects and recommends the incorporation of SEA into South African legislation.

1.5 Analytical Approach and Methodology

[13] The NEMA EIA process is applicable to all kinds of projects, irrespective of the nature or size of the project.
[14] This authorisation was amended after being challenged by the applicant as being impossible to implement as initially issued.
[15] DEA Strategy op cit note 11 refers to the need for SEA as part of Pillar 2 at 83.

The main method adopted in this study is a qualitative analysis of Gautrain EIA process in the context of the governing law. The topic dictates a case study research methodology in a 'real-life' context.[16] A case study design should be considered when the focus of the study is to answer 'how' and 'why' questions or where contextual conditions may be relevant to the phenomenon under study.[17] 'Case study research excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is previously known through research.'[18] Although there is no single approach to a case study,[19] the literature suggests various approaches which include designing and conducting the case study (including collecting the data – in this case mainly through textual, archival and desktop research); evaluating and analysing the case study evidence, in this case the 'unit of analysis' referred to by Baxter and Jack will be the process;[20] and finally preparing the report.[21]

The Gautrain Project is the *subject* of the case study, which is both 'intrinsic' and 'instrumental', in that it is itself of interest and also provides insight and facilitates an understanding of the issues identified for study.[22] The Project meets the requirements for the *subject* of the case study as it is '.. an instance of a class of phenomena that provides an analytical frame – an *object*- within which the study is conducted and which the case illuminates and explicates.'[23]

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[16] P Baxter & S Jack 'Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers' (2008)13 *The Qualitative Report* at 544.
[17] Ibid at 545.
[18] S Soy 'The Case Study as a Research Method' Uses and Users of Information (1997) *LIS* 391D.1.
[19] Case Study as a Research Method, Dissertation Blog, posted by J Williams on 12 September 2011.
[20] Baxter & Jack op cit note 16 at 545-546.
[21] Ibid, and W Tellis 'Application of a Case Study Methodology' (1997) 3 *The Qualitative Report* (www.novaedu/ssss/QR3-3/tellis2.html).
[22] Baxter & Jack op cit 16 at 548-9.
[23] G Thomas 'A typology for the case study in social science following a review of definition, discourse and structure (2011) 17(6) *Qualitative Inquiry* at 511-521.

The benefit of the case study method is the detailed nature of the investigation which may be used to analyse the subject matter in its context. Both primary and secondary sources will be used to analyse the case study. Secondary sources will be extensively reviewed in order to avert one of the potential shortfalls of the case study methodology i.e. generalization of conclusions or bias regarding certain research questions.[24]

The study is an experiential application of 'law in action' seen through the lens of the case study. The opportunity is sought to examine, record, reflect on and critically analyse the statutory EIA requirements and the processes followed in the case of the Gautrain Project. To an extent, there will be evidence of a narrative approach, when the details of the Project are relayed. The epistemological base for the dissertation will be an interventionist one, with a focus on making recommendations regarding appropriate regulatory frameworks for the future planning and development of infrastructure development projects in South Africa. The case study methodology is well suited to the research as the topic is problem orientated and is based on the process of the development of the Gautrain project as one of the largest PPP infrastructure development projects in South Africa to date.

1.5.1 Disclosure

The writer has been involved in the Gautrain Project as environmental legal advisor for a period of more than 10 years and served as a legal advisor to the Province during the EIA processes. Problem areas were largely experienced from this vantage point. In addition, the writer was involved in litigious proceedings that flowed from the EIA processes.[25] Further research inquiries are intended to supplement, crystallise, develop and inform observations made during

[24] W Tellis op cit note 21.
[25] This included the *MLPORA* case op cit note 2. Most of the other litigation was settled out of court.

these processes. Only information in the public domain is used in this research, so as to avoid any potential ethical dilemmas or breaches of confidentiality undertakings.[26] In addition, the writer has notified the Gautrain Management Agency (GMA) and the Province's Gautrain Support Team of the nature and extent of this study and has received written permission from the GMA to pursue this research, which written permission has been supplied to the Faculty.

1.6 Research Questions

This study seeks to achieve its purpose by answering the following research questions:

I. How has the South African EIA process evolved over time and what problems are evident in relation to the following particular stages of the EIA process: the applicant for the authorisation, the scoping phase, the detailed impact assessment phase and the EMP process?

II. What were the problems with the Gautrain EIA process, particularly in relation to the aforementioned key stages/processes of the EIA and how could these be remedied?

III. What changes to the regulatory EIA regime for projects such as the Gautrain are required and how can these projects be planned or implemented differently?

The focus of the study remains the Gautrain Project as a case study with intrinsic value. In the words of Flyvbjerg et al

> '[w]e live in a time when the ability for constant learning is considered crucial to the welfare of individuals, organisations and nations. This is the age of the "learning society." However, in environmental impact assessment (EIA), which is the main methodology used by decision makers to predict environmental effects of megaprojects, surprisingly little learning is taking place. Or, to put the matter more positively, learning is only now beginning. This is true for megaprojects as well as for other types of projects. The reason for the lack of learning is that projects and their

[26] In terms of Regulation 11 of the 2010 EIA regulations, every report submitted under the regulations becomes a public document after the issuing of the environmental authorisation.

> environmental impacts are rarely audited *ex post*, and without post-auditing learning is impossible.'[27]

Tracy Field has also stated that 'we invest too little effort in examining the information and models that drive decision-making processes. There is work to be done in examining the detail of decision-making processes that potentially affect the environment, and this is not confined to decision-making by environmental authorities.'[28] EIA processes form part of the 'information and models that drive decision-making processes'.[29] Project proponents and Environmental Assessment Practitioners (EAPs) also make decisions about how to approach environmental assessment processes which influence the outcomes of the process as is illustrated by the Gautrain Project. These choices and decisions, as well as the EIA processes followed, need to be explained and analysed to identify flaws in the outcomes in order to contribute to this '*ex post*' learning and examination referred to by Flyvbjerg et al and Field. Once the project has been implemented it is an opportune time to review the efficacy of the EIA process and, further to the research questions above, ask questions such as –

- How appropriate and efficient was the process and did it lead to the desired outcomes?
- Were all of the impacts that eventuated properly identified and assessed in the EIA process?
- Were I&APs comments properly considered and, if not, what were the consequences for the Project?
- What aspects of the process worked well and which did not? What are the lessons learnt?

[27] B Flyvbjerg, N Bruzelius & W Rothengatter *MegaProjects and Risk: An Anatomy of Ambition* (2003) CambridgeUniversity Press at 49.
[28] Tracy-Lynn Field 'Sustainable development versus environmentalism: Competing paradigms for the South African EIA Regime' (2006) 123 *SALJ* at 435 and 436.
[29] Ibid

These are the kinds of issues which are unpacked in this study and which aim to better inform the environmental assessment of these kinds of infrastructure development projects in future.

The legislative context in which the Gautrain EIA processes are being evaluated is first set out and analysed in Chapter 2, in order to inform the evaluation of the Gautrain EIA processes in Chapter 3 as well as the conclusions and recommendations in Chapter 5.

2. Unpacking the South African EIA process

To reiterate, the following key aspects of the EIA process have been selected for investigation in this study - the Applicant; Scoping; the Impact Assessment Process (including amendment applications and public participation) and the Environmental Management Plan (EMP) Process. These are the key aspects of the EIA process, which require more thorough analysis and, which provide the greatest opportunities for learning, in the context of the Gautrain EIA.

Two components of the typical EIA process, which have not been focused on in this study are the Screening phase and the Review and Decision-making phase. It is acknowledged that these are also important phases of the EIA process and the Review and Decision-making process has been referred to where relevant. It has not been necessary to include the Screening[30] phase where it is decided whether or not EIA is required because this study focuses on a project which required full EIA and where it was trite that such EIA was required. Aucamp makes the point that 'strictly speaking, screening is not a part of the EIA process as it is the process used to determine whether an EIA is needed.'[31] Gautrain was a mega-project which clearly required a full EIA, which renders superfluous the discussion of the Screening phase in relation to this project. The decision-making process on the part of the environmental authorities, as to whether to approve the project, occurs last in the process. It must be emphasised that a decision by the competent authority on an EIA application is an administrative act in terms of the Promotion of Administrative Justice Act 3 of 2000 and is therefore subject to internal appeal, also an administrative act. These administrative decisions are subject to review by the High Court. The Review portion of this final phase is therefore also part of the EIA process. Nevertheless the

[30] Screening in the SA context involves the determination of whether or not Basic Assessment or EIA is required, usually with reference to the currently applicable listed activities. Definition adapted from Richard Burnett-Hall & Brian Jones *Burnett-Hall on Environmental Law* 2 ed (2009) at 497.

[31] PJ Aucamp *Environmental Impact Assessment – a practical guide for the discerning practitioner* Van Schaik Publishers 2009 at 13.

focus of the study is on the body of the EIA process as carried out by the project proponents, rather than its Screening precursor or its Decision-making and Review conclusion in the hands of the executive or the Court. Having said that, during the Gautrain Project the decisions made by the environmental authorities were the subject of court action and accordingly the Decision-Making and Review phase has been dealt with where relevant. In addition , certain decisions required by the applicant and other project participants, including the EAP, during the course of the EIA process have been dealt with in Chapter 5 below. It is recognised that, as pointed out by Field above, it is not only the decisions of regulatory authorities, but also those of private participants, that may have an impact on the environment.[32]

Accordingly, the core process components of EIA namely Scoping, Impact Assessment and the Environmental Management Plan are included in this study to give proper analytical context to the focus areas of the study. Wood notes the on-going need for research on EIA – both on substantive and procedural issues[33] and this study aims to contribute towards such research.

2.1. Introduction to the South African Statutory EIA Regime

'A well-founded legislative base with clear purpose, specific requirements and prescribed responsibilities' is a key factor which Sadler identifies for effective Environmental Assessment processes. [34] Wood, commenting on the 1997 EIA regulations and NEMA, is of the view that South Africa does have such a system in place. However, he suggests areas for improvement

[32] Field op cit note 28.
[33] C Wood *Environmental Impact Assessment: A Comparative Review* 2 ed 2003 at 369.
[34] B Sadler 'Environmental Assessment in a Changing World: Evaluating Practice to Improve Performance' *International Study of the Effectiveness of Environmental Assessment Final Report* (1996) 21.

and pins his hopes on the then-awaited 2006 EIA regulations, still to be made under NEMA, when he published his comparative review.[35]

EIAs were first provided for in South African Law by the Environment Conservation Act 73 of 1989 (the ECA) in sections 21 and 22.[36] These sections were contained in Part 5 of the Act, entitled 'Control of Activities which may have Detrimental Effects on the Environment'. The Minister made regulations in terms of these sections in September 1997, commonly known as the EIA regulations.[37] Regulation 1182 sets out a list of activities in respect of which environmental impact assessment reports and authorizations are required before one may commence the listed activity. As one would expect, the construction of a railway line is one of the activities listed.

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[35] Wood op cit note 33 at 105.

[36] Section 21 of the ECA provided for the identification of activities which will probably have detrimental effect on environment. Section 22 of the ECA prohibits the undertaking of identified activities without an authorization. Section 21 of the ECA read as follows-

> '(1) The Minister may by notice in the Gazette identify those activities which in his opinion may have a substantial detrimental effect on the environment, whether in general or in respect of certain areas.
> (2) ……
> (3) The Minister identifies an activity in terms of subsection (1) after consultation with-
> (a) the Minister of each department of State responsible for the execution, approval or control of such activity;
> (b) the Minister of State Expenditure; and
> (c) the competent authority of the province concerned.'

Section 22 of the ECA prohibited the undertaking of identified activities without an authorization.

> (1) No person shall undertake an activity identified in terms of section 21 (1) or cause such an activity to be undertaken except by virtue of a written authorisation issued by the Minister or by a competent authority or local authority or an officer, which competent authority, authority or officer shall be designated by the Minister by notice in the Gazette.
> (2) The authorisation referred to in subsection (1) shall only be issued after consideration of reports concerning the impact of the proposed activity and of alternative proposed activities on the environment, which shall be compiled and submitted by such persons and in such manner as may be prescribed.
> (3) The Minister or the competent authority, or a local authority or officer referred to in subsection (1), may at his or its discretion refuse or grant the authorisation for the proposed activity or an alternative proposed activity on such conditions, if any, as he or it may deem necessary.
> (4) If a condition imposed in terms of subsection (3) is not being complied with, the Minister, any competent authority or any local authority or officer may withdraw the authorisation in respect of which such condition was imposed, after at least 30 days' written notice was given to the person concerned.

[37] EIA Regulations GN R 1182 – 1184 in GG 18261 of 5 September 1997.

The introduction of a comprehensive statutory EIA regime in South Africa followed only four years after the first European Council Directive of June 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment[38] which was amended in 1997.[39] However, the regulations trailed some 30 years behind the National Environmental Policy Act of 1969 in the United States of America, which introduced a national EIA process for 'federally funded proposals' that would impact on the environment.[40] The latter was the first statutory EIA internationally, and incidentally also heralded the first international Strategic Environmental Assessment (SEA)[41] requirement.

The South African process to be followed in the completion of environmental impact reports is set out in Regulation 1183. Regulation 1183 was read in conjunction with the Department of Environment Affairs and Tourism (DEAT) Guideline Documents,[42] EIA Regulations, Implementation of sections 21, 22 and 26 of the Environment Conservation Act, April 1998. The EIA process set out in regulation 1183, read with section 24 of NEMA, was the process that was followed for the Gautrain EIA, since a number of the listed activities in Regulation 1182 were triggered.[43]

The National Environmental Management Act (NEMA)[44] was brought into operation on 1 January 1999. The legislature's commitment to sustainable development is clearly espoused in

[38] 85/337/EEC [1985] OJ L175/40. See Richard Burnett-Hall & Brian Jones *Burnett-Hall on Environmental Law* 2 ed (2009) 487 and 490.
[39] Directive 97/11.
[40] Amanda Mkhonza 'Environmental Impact Assessment & Sustainable Development in South Africa: The Predominance of Economic Considerations' Research Report submitted for an LLM by Coursework, University of the Witwatersrand, Johannesburg (30 November 2011) at 4.
[41] Wood op cit note 33 at 336.
[42] DEAT, Guideline Document, EIA Regulations, Implementation of sections 21, 22 and 26 of the Environment Conservation Act (April 1998).
[43] The main listed activity which the Gautrain Project triggered in GN R 1182 was activity 1(d) which included the construction or upgrading of roads, railways and associated structures. The Record of Decision issued for the project on 25 April 2004 indicates that the project also triggered listed activities 1(i), 1(o), 2(c), 2(e), and 10 of GN R 1182.
[44] Act 107 of 1998.

the NEMA principle that 'development must be socially, environmentally and economically sustainable'[45] and that 'sustainable development requires the consideration of all relevant factors'.[46] [47] Glazewski notes that the latter principle is further qualified by eight 'crucial' sub-principles which 'stipulate internationally emerging environmental norms, such as the precautionary principle, the preventive principle and the polluter pays principle.'[48] Chapter 5 of the Act on Integrated Environmental Management (IEM) included section 24 which provided for EIA. The NEMA operated in tandem with the ECA, in so far as impact assessments were concerned, until new EIA regulations were made under the NEMA. The principles in NEMA[49] and the provisions on IEM in Chapter 5 of NEMA still applied to all EIAs commenced in terms of the ECA EIA regulations after the NEMA came into effect. Section 24 of NEMA was substantially amended by Amendment Act 8 of 2004 and Amendment Act 62 of 2008. Glazewski notes that the amended section 24, 'departs fundamentally from the previous section 24, which triggered EA [environmental assessment] on the basis of the orthodox combination of both listing activities as well as the classic formula "activities…that may significantly affect the environment…" while the new regime relies solely on lists.'[50]

The UK writers Bell and McGillivray refer to environmental assessment as being a tool as well as a procedural technique. They remind us of the procedural nature of EIA and that, 'although they are intended to be preventative (and, some would argue, also precautionary), there

[45] Section 2(3) of NEMA.
[46] Section 2(4) of NEMA.
[47] The importance of the NEMA principles were highlighted by the court in *MEC: Department of Agriculture, Conservation and Environment and another v HTF Developers (Pty) Ltd* (unreported) 32/07 (CCT) 2007 para 62-65.
[48] J Glazewski *Environmental Law in South Africa* (2013) 7-13. Section 2(4) (a)(viii) of NEMA requires that 'negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.' Section 2(4)(p) of NEMA states that the costs of remedying pollution must be paid for by those responsible for harming the environment.
[49] Section 2 of NEMA.
[50] Glazewski & Brownlie 'Environmental Assessment' in Glazewski *Environmental Law in South Africa* (2013) at 10-18.

is nothing that requires the decision maker to refuse a development project …because negative environmental impacts are highlighted.' It is submitted that in South Africa, although the EIA regulations are underpinned by the NEMA principles discussed above, which are preventative and precautionary and have sustainable development[51] as an underlying purpose, the EIA regulations themselves, primarily because they are mainly list based, do not always support sustainable development.

There is no specific provision for SEA or sustainability assessment in SA law, as will appear from the discussion in Chapter 4 below. However, the term 'activities' as used in Chapter 5 of NEMA is defined to include 'policies, programmes, processes, plans and projects'[52] thereby foreshadowing the formal incorporation of SEA in future.

In July 2006 the first set of EIA regulations (the 2006 EIA regulations) made under NEMA came into operation and repealed the aforementioned EIA regulations under the ECA.[53] These EIA regulations were repealed and replaced in August 2010.[54] In this Chapter, reference is also made to the currently applicable 2010 regulations in order to demonstrate how EIA processes have changed, or not changed, since the 1997 and 2006 EIA regulations. All three sets of EIA regulations are evaluated only in regard to the key process related components and issues where the most learning can be derived from the EIA in the Gautrain Project, that is, the

[51] The term 'sustainable development' was defined in the World Commission on Environment and Development Report 'Our Common Future' commonly known as the Brundtland Report as 'development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs.' This definition has been incorporated into the NEMA definition of sustainable development as 'the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations.' For further information on the origins, development and meaning of sustainable development see Loretta A Feris 'The Role of Good Environmental Governance in the Sustainable Development of South Africa' 2010 (13) *PELJ* 1 at 78-92. See further the court's analysis of sustainable development in *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs* 2004 (5) SA 124 (W) para 144.

[52] Section 1 of NEMA.

[53] GN R 385, 386 & 387 in GG 28753 of 21 April 2006 which came into operation on 2 July 2006.

[54] GN R 543, 544, 545 & 546 in GG 33411 of 18 June 2010 amended by GN R 660 and R 661 of 30 July 2010 & GN R 1159 of 10 December 2010 and came into effect on 2 August 2010.

Applicant, the Scoping process, the Impact Assessment Process (including amendment applications) and the EMP Process.

Legal researchers in South Africa have written widely on EIA and related topics. The study has been informed by journal articles and research on, *inter alia* - public participation in the EIA process,[55] the EIA process itself,[56] the connection between EIA and sustainable development,[57] co-operative governance issues and environmental management,[58] administrative justice in decision-making[59] and the challenges[60] [61] with EIA in South Africa. There are fewer journal articles on EMPs, but more recent text books, guideline documents and primary sources have been consulted. The writer could not trace any articles on precisely the same subject as the proposed study. Accordingly it was necessary to review sources on all of the key issues covered in the research, such as the efficacy of the EIA regime and the possible application of SEA processes to projects such as the Gautrain Project.

During the course of the research it became necessary to source articles from environmental science and social science journals as well as legal journals. The only studies traced which specifically dealt with the Gautrain Project were from the social sciences faculties

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[55] Tumai Murombo 'Beyond Public Participation: The disjuncture between South Africa's environmental impact assessment (EIA) law and sustainable development' 2008(3) *PELJ* 1.

[56] Glazewski *Environmental Law in South Africa* 2 ed (2005) 229-253.

[57] Tracy-Lynn Field 'Sustainable development versus environmentalism: Competing paradigms for the South African EIA Regime' (2006) 123 *SALJ* 409-436, where she notes at 428 that 'the current South African EIA regime does not seem to be grounded in a sustainable development paradigm.'

[58] Elmene Bray 'Co-operative Governance in the Context of the National Environmental Management Act 107 of 1998' 1999 *SAJELP* at 1-12.

[59] Louis J Kotze & Andries J van der Walt 'Just Administrative Action and the Issue of Unreasonable Delay in the Environmental Impact Assessment Process: A South African Perspective'(2003) 10 *SAJELP* 39 at 39-66.

[60] S Brownlie, I Coetzee & MJ Morris 'Comments on the efficacy of South Africa's Environmental Impact Assessment Regime: A call for responses to government's legislative and policy framework to strengthen environmental governance and the sustainability of our developmental growth path' 6 April 2013.

[61] J Ridl and E Couzens 'Misplacing NEMA? A Consideration of some problematic aspects of South Africa's new EIA Regulations' (2010)13 *PELJ* 80 at 80-120.

and focused on the public participation process[62] and the social impact assessment for the Gautrain Project.[63] Environmental science journals, articles, books and text books proved to be most useful in so far as commentary[64] and analysis of the EIA process components are concerned – particularly for the Scoping and Impact Assessment[65] phases of the EIA process. The most useful of these sources were Sadler[66] and Wood,[67] both Northern Hemisphere researchers who have also researched the implementation of EIA in a range of different countries, including developing countries. Wood's comprehensive comparative review of EIA in the United States, the European Union, the United Kingdom, the Netherlands, Canada, Australia and New Zealand includes a section on the South Africa EIA System.[68] The comparative review includes the legal basis of EIA systems, the coverage of EIA systems, the consideration of alternatives, the Scoping of impacts, EIA report preparation, the mitigation of impacts, consultation and participation, benefits and costs of EIA systems and Strategic Environmental Assessment (SEA). Wood's work was a principal reference source due to his in depth and practical approach to the review of the same process elements of EIA that are covered in this study.

Most of the legal articles reviewed, although instructive on specific legal issues such as administrative justice, were found to focus mainly on case law reviews and concepts such as sustainable development, co-operative governance in the EIA process and public participation, which were of limited relevance. The articles on difficulties with the practical application or

[62] M Aregbeshola, K Mearns & R Donaldson 'Interested and Affected parties (I&APs) and consultants' viewpoints on the public participation process of the Gautrain Environmental Impact Assessment (EIA) (2011) 4 UNISA 46.
[63] T Uys 'Not in my backyard?': Challenges in the social impact assessment of the Gautrain Rapid Rail Link Project in South Africa' RAU.
[64] M Sowman, R Fuggle & Preston 'A review of the evolution of Environmental Evaluation Procedures in South Africa' (1995) *Environmental Impact Assessment Review* 45.
[65] C B Betey & E Godfred 'Environmental Impact Assessment and Sustainable Development in Africa: A Critical Review' (2013) 3 *Environment and Natural Resources Research* 37.
[66] Sadler op cit note 34.
[67] Wood op cit note 33.
[68] Wood op cit note 33 at 104.

interpretation of the EIA regulations were useful as reference points. However, there were no articles or studies which assessed the EIA process through the application of the process to a particular project or kind of project such as the present study. This study represents an intersection or overlap between legal studies and the environmental sciences. It will hopefully stimulate further analysis of the practical application of the South African EIA regulations to particular projects in order to enhance the body of research available to inform a comprehensive review of the effectiveness of EIA in relation to various types of projects in South Africa.

2.2. The Applicant

The Applicant was defined in GN R 1183 of 5 September 1997 as 'any person who applies for an authorisation to undertake an activity or to cause such an activity to be undertaken as contemplated in section 22(1) of the Act.' In terms of the 2006 EIA regulations[69] the 'applicant' simply means a person who has submitted or intends to submit an application. Despite the precedents, the 2010 EIA regulations[70] do not define the applicant. On the other hand the latter regulations are more flexible than their predecessors in that they do not restrict the ambit of persons who may be the applicant for an EIA. Therefore the applicant need not necessarily have been the owner of the infrastructure, or the owner of the land in terms of these regulations, and may for example be a building contractor. It is equally clear that a party who may wish to appoint a contractor to undertake the activity may also apply for the authorisation. This flexibility is important to note in the context of projects such as the Gautrain Project where a Concessionaire, rather than the Government party, may be the applicant in the EIA process.

[69] GN R 385 in GG 28753 of 21 April 2006 which came into operation on 2 July 2006.
[70] GN R 543 in GG 33411 of 18 June 2010 which came into effect on 2 August 2010.

The EIA Regulations have maintained through their iterations a consistent theme of regulating the practitioner carrying out the impact assessment. The main duty of the applicant in terms of the 1997 EIA process was to appoint an appropriately qualified 'independent consultant' and pay the consultant's costs to ensure compliance on its behalf with the requirements of the EIA Regulations.[71] In addition the applicant was required to ensure that 'the consultant provides to the relevant authority access to, and opportunity for review of, all procedures, underlying data, reports and interviews with interested parties'. [72] The applicant needed to ensure that the consultant has no financial or other interest in the undertaking of the project, or the public participation process and 'must indemnify the Government and all its officers from any liability arising from any reports, procedures or actions by the applicant or the consultant.[73] The 2006 EIA regulations also required the applicant to ensure that the EAP is independent and has the appropriate expertise. Regulation 19[74] sets out bases for the potential disqualification of EAPs, in which event the applicant may be required to appoint a new EAP. Likewise Regulation 17 of the 2010 EIA regulations[75] sets out *inter alia* the independence, expertise and disclosure requirements for EAPs and there is also a detailed 'disqualification of EAP' provision, similar to that contained in the 2006 regulations. Therefore, there is no restriction in the duties of the applicant which restricts the identity of the applicant, that is who the applicant may be, even though there are restrictions on who may be appointed as an EAP.

What if the identity of the applicant changed during the course of the EIA process or if one wanted to change the holder of the authorisation after the RoD had been issued? These questions are particularly apposite in the context of PPP projects such as the Gautrain Project

[71] GN R 1183 in GG 18261 of 5 September 1997, Regulation 3(1).
[72] GN R 1183, Regulation 3(1).
[73] Ibid.
[74] GN R 385 in GG 28753 of 21 April 2006.
[75] GN R 543 in GG 33411 of 18 June 2010 which came into effect on 2 August 2010.

where a Government Department typically applies for permission to develop a project and then later hands the responsibility and risk to design, construct and operate over to a Concessionaire.

There has been limited provision to date in the EIA Regulations for changes to the authorisation. Regulation 9(3) of GN R1183 provided for an amendment to the *conditions* of the RoD, but there was no provision in the 1997 EIA regulations for a change to the applicant or holder of the RoD. Therefore, although there was no restriction in the definition of the 'applicant' to allow for various parties applying for the RoD, once a particular applicant made the application and the RoD was issued, there were no clear mechanisms to transfer the RoD or change the applicant. This meant a fresh application would have been necessary. This could have led to the duplication of the entire EIA process for the same project by a different applicant. A new EIA process would introduce not only lengthy delays, but also additional risks to a proposed project such as the duplication of the public participation process, which may give rise to new objections to the activity, potential appeals and even applications for judicial review. It may even result in a negative RoD or a more onerous RoD with more stringent conditions over and above the concomitant costs and time delay implications, and is clearly impractical and untenable.

As is mentioned below in more detail in section 2.4.3 below, there were detailed provisions in the 2006 EIA regulations, which were largely replicated in the 2010 EIA regulations[76], for the amendment of authorisations. An amendment application was possible where there had been 'a change of ownership in the property and transfer of rights or obligations'.

There are no specific provisions in the SA statutory EIA regime dealing with the transferability of authorisations. In fact, many authorisations include a specific provision that the

[76] The 2010 EIA procedural regulations in GN R 543 are similar in many respects to the procedural regulations in GN R 385 of the 2006 EIA Regulations.

authorisation is not transferable. In practice, the problem of the transferability of EIA authorisations has usually been addressed by way of amendment applications.

An amendment application is provided for in terms of Regulation 39(2)(b) of the 2010 NEMA EIA regulations, which allows for an amendment application if 'there has been a change of ownership in the property and transfer of rights or obligations'(underlining emphasis added).[77] Obviously the 'and' may be problematic in many projects such as the Gautrain Project, where there may be a demonstrable transfer of rights or obligations but there was no change in ownership.

Section 24E(c) of NEMA currently provides that every environmental authorisation must as a minimum ensure that… 'provision is made for the transfer of rights and obligations when there is a change of ownership in the property'. However, the NEMA Second Amendment Bill B13-2013, proposed the deletion of the words 'where there is a change of ownership' in Section 24E(c). This proposed amendment was carried forward from the NEMA Amendment Bill B13 of 2012 published on 4 May 2012, which however also included the words 'if required' at the end. The words 'if required' have not been included in the National Environmental Management Laws Second Amendment Act 30 of 2013 published on 18 December 2013. Therefore, the duly amended section 24E(c) of NEMA reads as follows – 'every environmental authorisation must as a minimum ensure that… provision is made for the transfer of rights and obligations'.

This seems to indicate that in future there may be more possibilities for the transfer of rights or obligations in a range of circumstances, rather than only in the circumstance where there is a change in ownership and is an encouraging move towards a more flexible and practical approach in so far as the transfer of responsibilities is concerned. This is particularly encouraging

[77] No such provision was included in the corresponding provision of the 2006 EIA regulations, and only the "holder" of the authorisation could apply for the amendment thereof.

for PPP's such as the Gautrain Project where responsible parties change over the lifespan of the project from design and construction through to the operational phase. This possibility for the transfer of rights and obligations therefore opens the way for the transfer of specific compliance obligations in an environmental authorisation to particular parties who may be responsible for a particular geographical area of a project, or responsibility for particular conditions which may only relate to a particular phase of the project such as the construction phase.

2.3. The Scoping Process

'Scoping is described as a procedure for identifying potentially significant issues and concerns, possible alternatives, the scale of and approach to, a particular EA.'[78] Aucamp states that

> 'Scoping can be defined as the identification of a number of priority issues, from a broad range of potential problems, to be addressed by an EIA. It is a procedure for narrowing the scope of an assessment and ensuring that it remains focused on the truly significant issues or impacts... Scoping always involves interaction between all stakeholders (the public, government departments, industry and the proponent) to identify the key issues for investigation.'[79]

Therefore public participation is a key and crucial component of any scoping process. For more information on the public participation process see section 2.4 below. Wood refers to Weston who states that 'scoping can be regarded as the most important phase in the EIA process'[80] as it helps to eliminate and focus issues for the EIA process. Wood has devised a set of evaluation criteria which can be used to evaluate the effectiveness of the scoping process in EIA systems.[81]

[78] EIA Regulations: Draft Guidelines, DEAT, undated, at 8 and referred to in Glazewski op cit note 50 at 10-25.
[79] Aucamp op cit note 31 at 6 and 7.
[80] Wood op cit note 33 at 159.
[81] Wood op cit note 33 at 163.

Wood also cites Mulvihill and Jacobs[82] who are of the view that 'scoping is particularly important for controversial projects and where a diverse range of stakeholders was involved in the EIA process' as scoping increases the 'probability of a process that satisfies stakeholders.'[83] There are clear advantages to conducting public participation during the scoping process. As Wood reminds us '[b]y discussing and informing the public of the emerging issues related to the proposed action, agencies may reduce misunderstandings, build cooperative working relationships, educate the public and decision makers, and avoid potential conflicts.'[84] Thus public participation throughout the EIA process and particularly in the scoping phase is of major importance.

This was evident from the initial public participation phase for the Gautrain Project[85] where the consideration of various alternative routes in the different sections of the alignment led to the selection of alternatives which were supported by communities in the area. For example, in Sandton residents and businesses motivated for an underground alignment which had not been presented as one of the feasible alternatives for that area. The underground alignment was then assessed in the impact assessment phase and approved in the Project RoD. Not surprisingly no litigation arose from the Sandton alignment, as stakeholders were largely satisfied through the consultation process.

2.3.1 The treatment of the Scoping Process in the South African EIA Regulations since 1997

[82] Wood op cit note 33 at 351.
[83] Ibid.
[84] Wood op cit note 33 at 161.
[85] In the first half of 2002 when the Issues Report was being compiled.

A comprehensive scoping process was included in the first set of South African EIA regulations in 1997 and Wood refers to scoping as 'a strong feature of EIA in South Africa'.[86] The 1997 EIA regulations were preceded by the 1992 IEM Guidelines which refer to the scoping phase as being 'the critical stage in the IEM procedure.[87]

Government Notice R 1183 of 5 September 1997 stated that the relevant authority 'may' request the applicant to submit a Plan of Study for Scoping prior to the preparation of a Scoping Report.[88] The Plan of Study for Scoping was required to include a description of the activity, the tasks and a schedule for scoping, the stages for consultation of the authority and most importantly, 'a description of the proposed method of identifying the environmental issues and alternatives.'[89] Should the Plan of Study for Scoping be accepted by the authority, the applicant '*must* submit' a Scoping Report to the relevant authority. This is a noteworthy requirement as a Plan of Study for Scoping was completed for the Gautrain Project, however, a Scoping Report *per se* was not submitted due to time constraints.

From September 1997 to the end of June 2006, when South Africa's first set of EIA regulations were in force, the following requirements applied to the content of the scoping report: project description; description of how the environment may be affected; the environmental issues identified; all alternatives identified; and 'an appendix containing a description of the public participation process followed, including a list of interested parties and their comments.'[90]

The requirements were coupled with an express statement of the relevant authority's discretion to request changes to the Scoping Report, albeit expressed in a rather concerning way

[86] Wood op cit note 33 at 172.
[87] DEAT, *Integrated Environmental Management Guideline Series: Scoping 2* (1992) at 20.
[88] Regulation 6.
[89] GN R 1183, Regulation 5(2).
[90] GN R 1183, Regulation 6(1).

in that the amendments would be required for the authority to 'accept the scoping report'.[91] Although this option may be favourable from a flexibility point of view, it was expressed in an undesirable way in that it may militate against a just administrative decision making process. This is so because the authority should not be seen to be assisting the applicant to ensure a positive outcome, as this may amount to bias or a reasonable suspicion of bias, which is a ground for review of administrative action in terms of section 6(2)(iii) of the Promotion of Administrative Justice Act 3 of 2000.

The most distinctive aspect of the Scoping process in the 1997 EIA regulations is that they permitted the relevant authority to 'decide that the information contained in the scoping report is sufficient for the consideration of the application without further investigation.'[92] Alternatively, the scoping report would be required to be 'supplemented' by an EIA 'which focuses on the identified alternatives and environmental issues identified in the scoping report'.[93] The regulations therefore contemplated a final decision on an application at the scoping stage.[94] Such a decision may be to 'issue an authorisation with or without conditions' or to 'refuse the application'.[95]

In terms of the 2006 and 2010 EIA regulations, scoping must be applied to an application if the authorisation applied for is in respect of an activity listed in GN R 387 of 2006 and requires full impact assessment. The alternative to the scoping and impact assessment process in the 2006 and 2010 EIA regulations is Basic assessment. Basic assessment must be applied to an application if the authorisation applied for is in respect of an activity listed in GN R 386 of 2006. One of the purposes of adding Basic Assessment to the 2006 regulations, was in order to reduce

[91] GN R 1183, Regulation 6(2).
[92] GN R 1183, Regulation 6(3)(a).
[93] GN R 1183, Regulation 6(3)(b).
[94] GN R 1183, Regulation 6(4) and Regulation 9.
[95] GN R 1183, Regulation 9.

the number of exemption applications in terms of section 28A of the ECA. This exemption process under the ECA had become over-used as a kind of shortcut or mini-EIA and to circumvent the EIA and scoping requirements in certain instances.

Chapter 3, Part 3 of GN R 387 of 2006 and Chapter 3, Part 3 of GN R543 of 2010 set out the detailed process requirements and the required contents of a scoping report. However these are limited to the scoping and EIA process required in the regulations and therefore scoping is excluded from the Basic Assessment process. Glazewski commented on this exclusion by saying that 'the very purpose of scoping, namely to sift out the significant issues on which to focus an EIA, seems to have been undermined.'[96] The 2010 EIA regulations added requirements for the scoping report. Additional requirements include the need to specify the expertise of the EAP to carry out scoping procedures; only 'feasible and reasonable alternatives'[97] need be identified and; the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity must be explained. Cumulative impacts must be identified as well as all legislation and guidelines that have been considered. Information on the methodology that will be adopted in assessing the potential impacts and details of the public participation process must also be included. Therefore the requirements are more advanced and extensive.

Notably the report must contain a Plan of Study for EIA which sets out the proposed approach to the EIA for the application. This latter requirement pre-supposes that all activities for which scoping is conducted will automatically proceed to the detailed EIA stage, if the Scoping Report is approved. The EIA process will then continue in the name of the same applicant. There is therefore currently no provision for a final positive decision to be taken on an

[96] Glazewski op cit note 50 at 10-26.
[97] GN R 543 of 18 June 2010 Regulation 28 (1)(c).

application at the end of the scoping process as had been the case under the 1997 regulations. If the Scoping Report is accepted it proceeds to the EIA stage, while if it is rejected then the Scoping Report may be amended and re-submitted. The competent authority is obliged to keep reconsidering amended scoping reports[98] and there is no specific provision for a decision to refuse an application based on a scoping report. All that the competent authority may do is 'advise the EAP of any matter that may prejudice the application'.[99] Therefore, even if it is clear to the competent authority that the development will never be approved; the application may still proceed to EIA. This is surely a missed opportunity to make the scoping process more efficient and effective. Glazewski and Brownlie also note that 'there is no provision for an authority decision after scoping where impacts would not be significant.'[100] The writer is of the view that this hollowing out of the powers of the competent authority when considering a Scoping Report has substantially limited the usefulness of the scoping process.

A more expansive and flexible approach to scoping is motivated by Ridl and Couzens.[101] They argue that 'specialist investigation should be seen as an extension of scoping. It is an expert identification of impacts that together with the perceived impacts (issues) identified by non-expert participants in the process must be included in the scoping report.'[102] Since decisions in scoping often hinge on the issue of significance, Wood argues that 'these decisions often have to be made by individuals with appropriate levels of knowledge and expertise'.[103] I am in agreement with this approach of including specialist studies in the scoping phase. Wood notes that 'the scoping stage has often involved elements that belong to the EIA report preparation

[98] GN R 543 Regulation 30(4).
[99] GN R 543 Regulation 30(2).
[100] Glazewski op cit 50 at 10-26.
[101] Ridl & Couzens op cit note 61 at 80 -189.
[102] Ibid at 98 footnote 72.
[103] Wood op cit note 33 at 161.

phase elsewhere. Many scoping reports have not only identified impacts but have incorporated the evaluation of impacts and included specialist studies.'[104] He cites research by the then Environmental Assessment Research Group, relayed to him by Andries van der Walt, of what is now the North West University to the effect that specialist studies were used in 35% of scoping reports prepared in South Africa, when this was not required in terms of the 1997 EIA Regulations.[105] This helps to eliminate and focus the issues for the EIA process and in 1997, when a decision could be made after the scoping process, it meant that many projects did not even proceed to the EIA phase where this was unnecessary.

2.4. The Impact Assessment Process (including amendments & public participation)

Environmental Impact Assessment is defined in the Department of Environmental Affairs and Tourism's EIA Regulations Guideline Document of April 1998 succinctly as 'a process of examining the environmental effects of development'. Environmental impacts are defined in this Guideline Document as 'the degree of change in an environment resulting from the effect of an activity on the environment, whether desirable or undesirable.' Aucamp notes that 'this assessment stage is the most important (even critical) of the whole process'[106] and that as a minimum it should include the need for a desirability of the project, potential alternatives and the assessment of alternatives and cumulative impacts.[107]

One of the main focuses of this study is the timing of the impact assessment process for projects such as the Gautrain Project. When should the detailed impact assessment be done? It is necessary to refer to the requirements for impact assessment to ascertain whether these

[104] Wood op cit note 33 at 174.
[105] Ibid.
[106] Aucamp op cit note 31 at 60.
[107] Aucamp op cit note 31 at 61-72.

requirements can be met at various stages of the project such as planning, preliminary design, detailed design and the construction phase. The key legislative requirement is that the EIA must be completed and the environmental authorisation must be obtained *prior to the commencement of construction.* However, there is no requirement specifying when the EIA should be conducted in the planning and design phase. The approach followed by the regulatory authorities is that the statutory requirements for EIA must be met.

The South African EIA regulations specify the minimum content of Environmental Impact Reports (EIRs) and processes to be followed in their compilation, particularly relating to public participation. There are also important qualitative requirements – EIAs should be directed at the correct stakeholders and the reports should be well written in plain language, be brief, honest and unbiased.[108] Glazewski observes that 'four fundamental mechanisms' need to be successfully carried out in an EIA namely, the consideration of alternatives, the application of the mitigation hierarchy,[109] stakeholder engagement and inter-sectoral co-ordination.[110] This is the stage where wide ranging specialist studies may be required across a broad range of disciplines, such as those completed in the Gautrain Project (see Chapter 3.4. below) and each of these studies should address the aforementioned four fundamental mechanisms. The question is whether the Gautrain EIA did cover the four fundamental mechanisms that Glazewski refers to and if not, is this in some way instructive in so far as the timing of the EIA is concerned?

[108] Wood op cit 33 at 182 with reference to Glasson *et al* (1999).

[109] 'Mitigation' involves selecting and implementing measures to protect the environment from potentially adverse impacts. A 'mitigation hierarchy' refers to the selection of mitigation measures in an order of priority to first avoid or prevent adverse impacts; then to minimise impacts; then to rehabilitate or restore and finally to offset any residual impacts. Both of these definitions have been adapted from the *Mining and Biodiversity Guideline: Mainstreaming biodiversity into the mining sector,* 2013 at 52.

[110] Glazewski op cit note 50 at 10-3.

2.4.1. Impact Assessment Requirements

The content requirements for the EIR[111] for the Gautrain Project EIA were the following under the 1997 regulations –

- A description of each alternative[112], including the extent and significance of each impact and the *possibilities for mitigation of each identified impact* (my emphasis);
- A comparative assessment of all the alternatives; and
- Appendices containing descriptions of the environment, the activity, the public participation process, interested & affected parties and their comments, media coverage and other information referred to in the approved plan of study.[113]

Furthermore, NEMA was applicable at the time of the Gautrain EIA.[114] Section 24(1) of NEMA at that stage required that the potential impact on the environment; socio-economic conditions and the cultural heritage of activities of activities that require authorisation and which may significantly affect the environment, must be assessed prior to implementation. In the section on minimum 'procedures for the investigation, assessment and communication of the potential impact of activities'[115] the Act also required the 'investigation of mitigation measures to keep adverse impacts to a minimum…'.[116]

[111] The April 1998 Guideline Document defines the EIR at p 6 as 'a report describing the process of examining the environmental effects of a development proposal, the expected impacts and the proposed mitigating measures.'
[112] The April 1998 Guideline Document defines 'alternatives' as 'a possible course of action, in place of another, that would meet the same purpose and need (of proposal). Alternatives can refer to any of the following but are not limited thereto: alternative sites for development, alternative projects for a particular site, alternative site layouts, alternative designs, alternative processes and materials. In Integrated Environmental Management the so called 'no action' alternative may also require investigation in certain circumstances.'
[113] GN R 1183, Regulation 8.
[114] NEMA came into operation on 1 January 1999.
[115] Section 24(7) of NEMA as it was prior to amendment.
[116] Section 24(7)(c) of NEMA as it was prior to amendment.

As is evident from the more detailed description of the Gautrain EIA in the next Chapter, alternative alignments were presented to interested and affected parties and were assessed and compared in the EIA. The EIR also contains descriptions of the environment, the activity and the public participation process. However, the EIR did not in detail cover *possibilities for mitigation of each identified impact.* Therefore it is apparent that one of the 'four fundamental mechanisms', identified by Glazewski, which need to be successfully carried out in an EIA namely, the application of the mitigation hierarchy, was not robustly covered in the Gautrain EIA. The main reason for this was that the designs were only in a preliminary phase and therefore detailed information on the impacts and possible mitigation measures could not have been available. This is explained further in the section on the Environmental Management Plan (EMP) below.

The 2006 and 2010 EIA regulations have substantially increased the required contents of EIRs compared to the 1997 regulations.[117] The 2010 EIA regulations require[118] *inter alia,* an assessment of each identified potentially significant impact, including; cumulative impacts; the nature, extent, probability and duration of the impact; the degree to which the impact can be reversed; the degree to which the impact may cause irreplaceable loss of resources; and *the degree to which the impact may be mitigated.* It is submitted that this requires a higher standard of investigation than was required in terms of the 1997 regulations where only 'possibilities for mitigation' were required. The requirements for the assessment of impacts and mitigation measures have become more advanced in practice with the passage of time and we must be cautious about evaluating EIAs that were completed a number of years ago in terms of an earlier set of requirements. Glazewski and Brownlie note that in the impact assessment process there is

[117] The detailed requirements for the content of EIA reports are substantially the same in the 2006 and 2010 EIA regulations.[117]
[118] GN R 543, Regulation 31(2)(l).

'no explicit requirement to take into consideration any "limits of acceptable change" or standards contained in policy, plans or other strategic instruments that may reflect societal goals and thus the likely significance of impacts in relation thereto.'[119]

When compiling a Basic Assessment Report the EAP is specifically obliged to take relevant guidelines and policies into account.[120] It is presumed that this requirement was erroneously omitted from the Scoping and EIA process in GN R543, also possibly because the EAPs are required to have this knowledge for all processes in terms of the regulations in accordance with Regulation 17 of GN R543.

Detailed information is set out in Chapter 3.4 on the content and process of the impact assessment for the Gautrain Project. The range of specialist studies that were conducted was varied and comprehensive and included the assessment of socio-economic impacts, as was the practice at the time. Although the ECA specifically provided for regulations on EIA reports to identify the affected economic and social interests of activities and alternatives,[121] no such regulations were ever promulgated, even though the IEM Guidelines in South Africa acknowledged that socio-economic issues, cultural resources and cumulative impacts should be assessed.[122]

NEMA however introduced the specific requirement for the investigation of the impacts on 'socioeconomic conditions' in section 24(1). Unexpectedly, and it is submitted misguidedly, the NEMA Amendment Act 8 of 2004 removed the reference to potential impacts on 'socio-economic conditions and cultural resources' as originally included in section 24(1) of NEMA, with reference to the purpose or objectives of EIA. The writer is in agreement with a few authors

[119] Glazewski op cit 50 at 10-26.
[120] GN R 543, Regulation 22(3).
[121] Environment Conservation Act 73 of 1989 s 26(a)(iv).
[122] IEM Guideline Series 5.

who noted that the objective seemed to be to reduce the scope of EIA, which was a retrogressive step.[123]

Consequently, a few years later the Constitutional Court was faced with the question whether socio-economic considerations should be taken into account in the consideration of an EIA application to establish a filling station, in the case of *Fuel Retailers Association of Southern Africa v Director General Environmental Management, Department of Agriculture, Conservation and Environment Mpumalanga Province.*[124] At paragraph 62 of the judgement the court made it clear that NEMA compels the consideration of socio-economic factors by authorities as an integral part of their environmental responsibility and in furtherance of the principle of sustainable development.[125] This was a welcome clarification of the legal position since the amendment of NEMA and a confirmation of the robust and inclusive nature of impact assessment.

2.4.2 Amendment Applications

The amendment application process played a key role in the extended Gautrain EIA process, in that it was used to obtain authorisations to change large portions of the alignment after the Project RoD had been issued in April 2004. Numerous amendment applications were submitted during the period from 2005 to 2009.

Once a Record of Decision (RoD) was issued in terms of these regulations, only its *conditions* could be varied in terms of Regulation 9(3) of GN R 1183 - this stated that

[123] M Kidd & F Retief 'Environmental Assessment' in RF Fuggle & MA Rabie *Environmental Management in South Africa* 2ed (2009) 1027.
[124] 2007 10 BCLR 1059 (CC).
[125] This was confirmed by the Constitutional Court in *MEC: Department of Agriculture, Conservation and Environment and another v HTF Developers (Pty) Ltd* (unreported) 32/07 (CCT) 2007 para 60.

> 'The relevant authority may, from time to time, *on new information*, review any such *condition* determined by it as contemplated in sub regulation (1) (a), and if it deems it necessary, delete or amend such *condition*, or at its discretion, determine new conditions, in a manner that is *lawful, reasonable and procedurally fair.*'[126] (my emphasis)

This was the only statutory provision at the time which allowed for the amendment of RoDs and there were no clear procedural requirements although the powers conferred must be exercised in a manner that is 'lawful, reasonable and procedurally fair'. This was the provision that was relied upon for many of the amendment applications brought for the Gautrain Project, see the further discussion in Chapter 3 below.

'New information' must be available that was not available at the time the relevant authority made its decision on the *de novo* application in terms of section 22 of the ECA. The new route alignments proposed by the preferred bidder in the Gautrain Project were accepted as 'new information' for the purposes of Regulation 9(3) of GN R 1183.

A key issue for analysis is whether the alignment or project description in the RoD constitutes a *condition* of the RoD or not. If not, it would not be lawful to amend the project or alignment by way of Regulation 9(3) of GN R 1183 since the regulation only allowed the amendment of conditions. The introductory paragraph to the Project RoD, provides that the Department (GDARD) authorizes the Department of Public Transport, Roads & Works to 'undertake the activity specified/detailed below subject to the indicated *conditions*.' This may be read to imply that the balance of the content of the RoD constitute *conditions* to the RoD and therefore are subject to amendment in terms of Regulation 9(3) of GN R 1183. However, this is followed by the 'Description, Extent and location of the Activity'[127], where the project is described in broad terms and not presented in the form of a *condition* to the Project RoD. The

[126] The regulation was inserted into GN R 1183 by GN R 672 of 10 May 2002 specifically to allow for the amendment of conditions of RoDs to address this gap in the legislation.
[127] Paragraph 1 of the Project RoD of 25 April 2004.

detailed 'Route Alignment' is then set out under a section headed 'Specific conditions'. The full 'Description of the Activity' and the 'Route Alignment' is set out in section 3.1 below and the latter is the alignment that was ultimately to be amended by the various amendment applications in terms of Regulation 9(3) of GN R 1183. Even though the Route Alignment section of the Project RoD is headed 'Specific Conditions' it is debatable whether the project or alignment itself is in fact a *condition* of the RoD. Conditions are usually additional requirements on how the activity should be implemented, rather than the activity itself. It is submitted that if an amendment constituted a change to the 'Project Description' then this would not constitute a change to a condition and Regulation 9(3) could not be applied. A new application in terms of section 22 of the ECA would be necessary. However, in the case of the Gautrain Project, the regulatory authority accepted the 'Route Alignment' as a condition which could be altered by way of Regulation 9(3) of GN R 1183, thereby allowing for changes to the 'Route Alignment' in terms of Regulation 9(3) since the overall 'Project Description' remained unchanged. Therefore fresh applications for authorization in terms of section 22 of the ECA were not necessary, although it does not follow that the amendment application process need be any less onerous than would be required for the authorization of a new activity. The extent of the impacts of the proposed changes would ultimately determine the content and level of assessments to be applied.

The 2006 and 2010 EIA Regulations include more detailed provisions for applications for amendment of 'environmental authorisations' which sought to address some of the uncertainties.[128] In terms of the 2010 EIA Regulations an amendment application[129] may be submitted where there is a material change in the circumstances which existed at the time of granting the authorisation; there has been a change of ownership in the property and transfer of

[128] GN R 385 and GN R 543, Chapter 4.
[129] The application needs to be motivated in writing and official forms must be completed.

rights or obligations (see 2.2 above); or any detail contained in the authorisation must be amended, added, substituted, corrected, removed or updated.[130] Note the reference to 'any detail' being subject to amendment rather than being restricted to 'conditions' only as was the case in the 1997 EIA regulations.

The competent authority decides whether the application is for a non-substantive amendment, typically where the environment or the rights or interests of other parties are not likely to be adversely affected, or whether it is a substantive amendment, typically where the environment or the rights or interests of other parties are likely to be adversely affected.[131] It is also possible for the competent authority to amend the authorisation on its own initiative where it is necessary or desirable to prevent deterioration of the environment; achieve prescribed environmental standards or to accommodate socio-economic impacts, where this is in the public interest.[132] The competent authority may issue an amendment either by way of 'a new environmental authorisation *or an addendum to the relevant environmental authorisation*.'[133] This is a significant addition to the 2010 regulations which was not included in the 2006 regulations. As discussed in further detail below, it would have been preferable for the Gautrain alignment amendment authorisations to be issued as addenda to the Project RoD as it would have made the decisions more accessible to I&APs, however, the regulations did not specifically provide for this at the time.

[130] GN R 543, Regulation 39.
[131] According to GN R 543, Regulation 41 where the amendment application is deemed to be substantive, the competent authority must request the applicant to conduct an appropriate public participation process; to conduct 'such investigations and assessments as the competent authority may direct, and to prepare reports on those investigations and assessments' and to use an EAP if so directed.
[132] GN R 543, Regulation 43.
[133] GN R 543, Regulation 45(2).

Certain of the required Gautrain amendment applications were conducted in terms of the amendment provisions contained in the 2006 EIA regulations,[134] pursuant to the transitional provisions in GN R 385 of 2006, that is Regulation 84(3). In terms of Regulation 84(3) any authorization issued in terms of the previous EIA regulations is considered to be 'an environmental authorization issued in terms of these regulations'. Therefore such an authorization would need to be amended by way of the amendment provisions in Chapter 4 of GN R 385, namely the process used for the Gautrain amendment applications brought after July 2006. The current 2010 EIA regulations contain similar transitional provisions[135] which essentially result in all amendment applications being brought in terms of the currently applicable EIA regulations as any authorisation issued under previous regulations are deemed to be authorisations in terms of the current regime. This mechanism ensures that amendment applications comply with current EIA statutory requirements, even where the authorisation that is being amended was issued some time ago and the initial EIA was subject to less robust or stringent EIA requirements.

Certain amendment applications also served to incorporate minor changes to associated infrastructure. Since the 1997 and 2006 EIA Regulations included the phrase 'associated structures or infrastructure' in the list of activities for assessment, these could be included in the amendments. However, it is noteworthy that this phrase was not carried forward into the 2010 EIA regulations. Therefore although many of the Gautrain's associated activities were efficiently covered by this phrase in the 1997 and 2006 regulations, its current exclusion from the 2010 EIA regulations may lead to the unnecessary proliferation of further impact assessment in similar projects in future.

[134] I.e. those amendments required after July 2006 described in section 3.4.2 below.
[135] GN R 543, Regulations 73(2) and 75(2).

2.4.3 Public participation requirements

Public participation is also referred to as stakeholder involvement and 'is the process in which individuals, companies, authorities or groups that are affected by a proposed intervention participate in a prescribed process'[136] in this case the EIA process. Wood eloquently describes the objective of public participation in EIA as a process 'to improve the quality of environmental decisions by the identification of, assignment of significance to, and mitigation of, impacts and the prevention of environmentally unacceptable development.'[137] The harnessing of public opinion is as important as expert opinion as far as Wood is concerned,[138] as both may be used to evaluate the significance of identified impacts.

The NEMA principles enshrine the requirement for public participation in section 2 of NEMA.[139] Section 24(4) of NEMA requires that

> 'procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must ensure… public information and participation procedures which provide all interested and affected parties, including all organs of state in all spheres of government that may have jurisdiction over any aspect of the activity, with a reasonable opportunity to participate in those information and participation procedures'.[140]

This must be understood in the overall context of section 24 of the Constitution of the Republic of South Africa, 1996 which affords citizens the fundamental right 'to an environment which is not detrimental to their health or well-being; and to have the environment protected… through reasonable legislative and other measures…'.[141]

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[136] Aucamp op cit note 31 at 49.
[137] Wood op cit 33 at 275.
[138] Wood op cit 33 at181.
[139] *Inter alia* NEMA section 2(4)(f).
[140] Section 24(4)(v) of NEMA.
[141] This right was endorsed in *Director: Mineral Development, Gauteng Region and Another v Save the Vaal Environment and Others* 1999 (2) SA 709 (SCA).

The Bill of Rights in the Constitution of the Republic of South Africa, 1996 also includes the right to just administrative action,[142] access to information[143] and affords broadened *locus standi.*[144] Therefore, the public participation requirements are underpinned by the Constitution of the Republic of South Africa, 1996,[145] Promotion of Access to Information Act 2 of 2000, the Promotion of Administrative Justice Act 3 of 2000 and key provisions of NEMA such as section 31. Section 24(4)(a)(v) of NEMA requires that 'public information and participation procedures' which provide all I&APs with a reasonable opportunity to participate must be ensured with respect to every application for environmental authorisation. Wood furthermore reminds us that value judgments in EIA are also made in a political context, however, adequate public participation in processes will help to ensure that the correct issues are analysed and assessed but that ultimately it is the responsibility of the proponent (or the EAP) to ensure that significant issues are assessed.[146]

The procedures to be followed for such public participation processes are set out in Chapter 6 of the 2006 and 2010 EIA regulations and are substantially similar. These requirements fleshed out and provided the necessary detail to the rather bald public consultation requirements in the 1997 EIA regulations,[147] which were supported only by guidelines on public participation processes. Provision is made for the notification of the EIA process and timeframes as well as public meetings. Inevitably, as was the case with the Gautrain Project, focus group meetings are also held with affected parties. Copies of EIA related reports are required to be made available for public scrutiny and comment at each stage of the EIA process namely, the

[142] Constitution of the Republic of South Africa, 1996 at section 33.
[143] Ibid Section 32.
[144] Ibid Section 38.
[145] Ibid particularly at sections 24, 32, 33 and 38.
[146] Wood op cit 33 at 162 where he refers to Weston and Marriott.
[147] GN R 1183, Regulations 6(1)(e) and Regulation 8(1)(c)(iii).

draft Scoping Report, the draft EIA report (or EIR) and the draft EMP. After the *Earthlife Africa* decision,[148] final reports, incorporating the comments of I&AP's have also routinely been made available for a further round of public comment. This requirement is now specifically provided for in terms of Regulation 56(2) of GN R 543 of the June 2010 EIA regulations.

The components of the public participation process for the Gautrain EIA are represented on the flow diagram in section 3.4.1 below. In the section on Scoping (section 2.3) above it is mentioned how in certain areas stakeholders were able to influence the choice of alternative rail alignments, and even present completely new alignments through the participation process, which were approved and implemented. This was the case in Sandton.[149] This demonstrated the value of robust public participation as it improved the quality of the alignments selected for assessment as well as the acceptability to stakeholders. However, there were other areas where the public was equally mobilised and proactive, such as in Pretoria and Centurion, who presented alternative alignments that were not accepted. It was not surprising then that these were the areas where the High Court litigation relating to the EIA emanated from, as I&APs were unhappy with the proposed project in those areas. Aregbeshola[150] presents the view that, 'public consultation on the design of the project took place only after the project had been approved and… …if the public comes to the realisation that their input is disregarded, this may lead to legal proceedings being brought against the project proponent.'[151] His study found that the public participation improved by 2008, i.e. after the project had been approved in 2004, but when more detailed

[148] *Earthlife Africa v Director-General: Department of Environmental Affairs and Tourism and Another* 2005 (3) SA 156 (C). In this case, it was held that I&APs must be afforded the right to comment on the Final EIA report submitted to the authorities in terms of the *audi alteram partem* rule, even though the then applicable 1997 EIA regulations did not specifically require consultation at this stage.

[149] A new underground alignment proposed by I&APs emerged from the Public Open Days and Focus Group meetings held in Sandton between January and April 2002, when the reference alignment and certain alternative alignments presented the Sandton alignment at grade (that is on surface).

[150] Aregbeshola *et al* op cit note 62.

[151] Ibid at 1285.

design information was available.[152] Legal proceedings were indeed instituted by four groups of stakeholders in Pretoria, Centurion, Dunkeld and Modderfontein.

In other areas where residents were less well-resourced, such as Rhodesfield which is near the OR Tambo International Airport and an industrial area, almost no input or opposition was encountered during the consultation process. In that area the alignment was changed due to the project proponent's design and cost imperatives rather than as a result of public input.[153] The public participation process is sadly perceived by some in South Africa as being a 'waste of time' as it is rare for their inputs to be fully incorporated in the process, particularly when they are poor or marginalised communities. There is also a fair degree of stakeholder fatigue. This was noted in the Gautrain public meetings which were well attended at the outset of the EIA process but interest waned and attendance dwindled along many sections of the alignment when subsequent portions of the EIA process were undertaken, such as the amendment applications and consultation on the EMP.[154]

One of the difficulties with the public participation requirements in the 1997 EIA regulations is that they simply required 'an appendix containing a description of the public participation process followed, including a list of interested parties and their comments.'[155] Therefore it was, and is still, common practice in many EIAs to simply append a table of comments from I&APs to the EIA Reports. It is submitted that this practice is inadequate and does not give true meaning and effect to public participation since it amounts only to consultation and not participation. Participation implies that stakeholders form part of the assessment process and their inputs assist with the weighting of the significance of impacts and

[152] Ibid at 1284.
[153] The reference alignment was at grade with a tunnel under highways around the airport. This alignment was changed to a viaduct structure to eliminate the higher cost of tunnelling.
[154] There were a few communities who remained fully engaged with the EIA process through its lifespan.
[155] Regulation 6(1)(e) and Regulation 8(1)(c)(iii) of GN R 1183.

the suggestion and consideration of alternatives and mitigation measures, as suggested by Wood in the quote at the beginning of this section. In order to achieve this it is submitted that reasonable I&AP comments should be incorporated within the body of the EIA reports, where it should be demonstrated that these comments have been analysed and assessed by the EAP in the same way as the applicant's proposals would have been assessed.[156] Certain comments or proposals may be discarded but not without substantiation being provided and, others may be accepted, also with reasons being provided. Unfortunately the 2010 EIA regulations have not remedied this problem. Regulation 57 of GN R 543 merely requires that 'the comments of interested and affected parties are recorded in reports and that such written comments, including records of meetings, are attached to the report, submitted to the competent authority in terms of these Regulations.'

The focus of the regulations is still on making sure that the competent authority is made aware of all comments of I&APs prior to making its decision. However, the opportunity for I&APs to actually participate in the EIA process by assisting the EAP to determine the significance of impacts and the appropriateness of mitigation measures is lost. As a result I&APs in South Africa are frequently only afforded the opportunity to influence the competent authority's decision-making process as their comments are be presented 'as is' to the competent authority.

Although the Gautrain EIA public participation process was widely regarded as one of the most extensive such processes undertaken to date in South Africa, this view may have arisen from the linear nature of the project and the wide range of communities consulted along the route. There were a large number of public and focus group meetings – perhaps too many

[156] It is acknowledged that this kind of requirement is likely to place a large strain on EAPs in terms of the fulfilment of their duties and would no doubt increase the costs and time requirements of EIA considerably.

meetings. A more streamlined process which incorporated public participation at a SEA level may not have required as many meetings. A number of the communities consulted were not satisfied with the process, especially where they were not successful in changing the alignment in their areas. This was to be expected. Those I&APs that influenced the alignment were most satisfied. There was arguably too much focus on the linear placement of the alignment in the public participation process rather than on the assessment of impacts such as noise. Where these impacts were raised they should have been incorporated into the specialist studies in a more integrated way rather than being presented in an appendix to the EIR, although as pointed out above, this was in compliance with the 1997 EIA regulations.

In most projects the applicant completes the project feasibility stage without the input of I&APs and it is often difficult to influence project proponents to consider project alternatives once the feasibility stage has been completed, as has been demonstrated by the recent eToll project in Gauteng. It is encouraging that regulations on procedures to be followed in promoting public participation in transport planning processes were issued by the Gauteng Department of Transport and Roads in September 2013 under the National Land Transport Act 5 of 2009.[157] Public participation is now required on the integrated transport plans which the Province and its municipalities are required to develop. This kind of regulatory imperative and guidance would have greatly benefitted the planning processes of both the Gautrain and Bus Rapid Transit projects. In addition they would possibly have reduced the scope and complexity of the initial identification of issues and public participation process as part of the Gautrain EIA and would also have assisted with inter-governmental co-operation. This kind of macro-level planning and public participation process can be seen to be part of a Strategic Environmental Assessment (SEA) process and is therefore discussed further in the section on SEA in Chapter 4 below.

[157] Gauteng Province Gazette 266 of 12 September 2013.

2.5. The Environmental Management Plan (EMP) Process

As stated in Chapter 1, in this study EMP refers to Environmental Management Plan/s (rather than Programmes) as this is the term that was used in the Project RoD for the Gautrain of April 2004.[158] At the time the Gautrain Project RoD was issued the Department of Environment Affairs favoured the term Environmental Management Plan (rather than Programme) as is evidenced by its 2004 Guideline Document on Environmental Management Plans. However, when EMP requirements were incorporated in section 24N of NEMA, by the NEMA Amendment Act 62 of 2008, the term used was Environmental Management Programme (rather than Plan). It is assumed that this term was used since one of the main objectives of the Amendment Act was to make section 24 of NEMA applicable to the mining industry. Environmental Management Programme Reports are compiled by mining companies in order to obtain approval to exercise mining rights[159] in terms of the Mineral and Petroleum Resources Development Act,[160] and the Department possibly sought to align itself to some extent with that terminology. The Department also possibly sought to distinguish Environmental Management Programmes from the Environmental Management Plans which governmental departments were required to prepare in terms of section 11 of NEMA. This terminology has created some confusion in practice, although it is safe to say that both an Environmental Management Programme and an Environmental Management Plan have the same objectives and are often referred to interchangeably as Environmental Management Plans or Environmental Management Programmes in practice.

[158] The detailed requirements for the Gautrain EMP process are set out in Chapter 3 below.
[159] In terms of the Mineral and Petroleum Resources Development Act 28 0f 2002 an Environmental Management Plan is required to be approved in order to exercise prospecting rights.
[160] Act 28 of 2002.

A 2005 Guideline Document on EMPs states that an Environmental Management Plan can be defined as 'an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented; and that the positive benefits of the projects are enhanced'.[161] EMPs are therefore important tools for ensuring that the management actions arising from Environmental Impact Assessment (EIA) processes are clearly defined and implemented through all phases of the project life-cycle.[162] Glazewski defines EMPs as 'a dynamic set of objectives, targets, actions and responsibilities prepared for the management of a particular project or area.'[163] Aucamp states that, 'the mitigation, monitoring and management component of EIAs often receive less attention than the assessment of the impacts.'[164] In practice, the focus on the content and value of EMPs has sharpened dramatically in the past seven or so years, mainly due to the introduction of statutory requirements for EMPs in 2006.

EMPs are not specifically defined in NEMA and were not included in the EIA process under the ECA. The 1997 EIA regulations under the ECA did not contain any requirements regarding EMPs, auditing or monitoring, as the IEM procedures had, and Wood notes that 'some felt the EIA system was little more than a pastiche of the IEM procedure' as the entire IEM procedure was not legislated.[165]

The 2006 EIA Regulations introduced statutory requirements for EMPs for the first time and referred to them as Environmental Management *Plans*. These were then augmented in the 2010 EIA regulations (where they were referred to as Environmental Management *Programmes*).

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[161] CSIR for Western Cape Department of Environment Affairs and Development Planning, *Guideline for EMPs* (2005).
[162] Ibid.
[163] Glazewski op cit note 50 at 10-8.
[164] Aucamp op cit note 31 at 91.
[165] Wood op cit note 33 at 86.

Over time more focus has been placed on mitigation, monitoring and management of environmental impacts *after* environmental authorisations have been issued.

The primary purpose of EMPs is to give a description of the project or the development's commitments to mitigation, monitoring and management of the project. EMPs can be distinguished from the impact assessment in that the EMP should deal with the 'how' of project implementation, whereas the impact assessment covers the 'what and why' regarding a proposed project. EMPs are often drafted by the EAP that conducted the EIA, although they may be drafted by the project proponent, unlike the EIA which must be conducted by an independent EAP. EMPs must also be approved by the competent authority.

Section 24N of NEMA[166] stipulates that where EIA has been identified as the environmental instrument to be applied in informing the environmental authorisation application, the Minister of Environmental Affairs *must* require the submission of an EMP before considering the application for an environmental authorisation.[167] The section furthermore details the required contents of an EMP and the obligations imposed on any person issued with an environmental authorisation. In essence information on 'any proposed management, mitigation, protection or remedial measures that will be undertaken to address the environmental impacts that have been identified in a report contemplated in subsection 24(1A), including environmental impacts or objectives' must be included.[168] There are increased requirements regarding accountability in section 24N of NEMA. For example, information identifying the persons who will be responsible for the implementation must be included as well as information in respect of the mechanisms proposed for monitoring and reporting on compliance with the EMP, timeframes

[166] Section 24N of NEMA came into effect on 1 May 2009.
[167] Section 24N(1A)of NEMA as amended.
[168] Section 24N(2)(a) of NEMA.

for implementation of the measures in the EMP and an environmental awareness plan must be included.

It is an offence for any person to fail to comply with or to contravene an approved environmental management programme in terms of s24F(2)(e) of NEMA. The key requirements of section 24N mirrored Regulation 34 of the 2006 EIA regulations, where an EMP was included as a key component of the EIA Report but not of a Basic Assessment Report. There were also no provisions covering the amendment of EMPs in the 2006 EIA regulations.

Regulations 22[169] and 31[170] of GN R 543 of the 2010 EIA Regulations require draft EMPs for Basic Assessment and EIA reports respectively and Regulation 33 sets out the content for the draft EMPs, which substantially replicates s24N of NEMA. Regulation 46 of the 2010 EIA Regulations also provide for Amendments to EMPs for the first time in SA legislation. This regulation allows the competent authority to authorise the amendment of EMPs, on its own initiative (after written notice to the holder and providing an opportunity for representations) or on written application with the necessary motivation. The grounds for amendment include the need to ensure compliance with the conditions of the environmental authorisation, to assess the 'continued appropriateness and adequacy of the EMP'[171] and/or where an EMP is in conflict with the principles of NEMA. An appropriate public participation process (usually in compliance with Regulation 54) must be conducted where appropriate namely, when the amendment is substantive, to bring the proposed amendment to the attention of 'potential I&APs, including organs of state which have jurisdiction in respect of any aspect of the relevant activity.' The

[169] GN R 543, Regulation 22(2)(l) requires that a Basic Assessment report includes a draft EMP containing the aspects set out in Regulation 33.
[170] GN R 543, Regulation 31(2)(p) requires that an EIA report includes a draft EMP containing the aspects set out in Regulation 33.
[171] GN R 543, Regulation 46(1)(e).

decision to approve or refuse the amendment is of course, subject to internal appeal and then High Court review.

Regulation 37 of the 2010 EIA Regulations requires that the environmental authorisation[172] contains details on the EMP, including the manner and frequency of approval and amendment. Since 2002, most environmental authorisations have also included a condition that all undertakings made in the EMP are strictly adhered to, as was the case in the Gautrain Project RoD.

It is submitted that the statutory requirements make it clear that the EMP dictates *how* a project will be implemented from an environmental perspective *after* the authorisation has been granted, although the development of the EMP should occur during the EIA process as a whole. This can be differentiated from the impact assessment stage of the EIA process as at this stage one assesses whether the project should proceed and, if so, in what form. Mitigation measures should be determined in the impact assessment stage and be implemented through the EMP. Glazewski calls for more focused and comprehensive EMPs.[173] He states that 'in some cases conditions that are imposed [in environmental authorisations] are aimed at investigating the mitigation of impacts, that should have been dealt with in the EIA in the first place.'[174] In the Gautrain Project certain mitigation measures could only be determined in the EMP stage, due to the lack of detailed information at the time the impact assessment was concluded. This is explained and evaluated further in Chapter 3.

2.6. Conclusion

[172] The term 'Record of Decision' used in the 1997 EIA regulations was replaced by the term 'environmental authorization' in the 2006 and 2010 EIA regulations.
[173] Glazewski op cit note 50 at 10-34.
[174] Ibid at 10-19.

The review of the statutory provisions in the context of the Gautrain Project in this Chapter has revealed fairly significant changes in EIA law since 1997. In certain cases the changes have been progressive and support certain of the recommendations made in Chapter 5. For example, the 2013 NEMA Second Amendment Act has now made it possible to apply for the transfer of obligations contained in an environmental authorisation to other parties. This reduces the onus on the applicant of being responsible for compliance with all of the conditions of the authorisation even where another party is *de facto* responsible for such compliance and is the only party capable of ensuring compliance, such as a company responsible for the operation of a rail system. Furthermore, amendment provisions have matured to allow for more robust procedures and for changes to authorisations that extend beyond changes to only 'conditions' of an authorisation, as was the case in the 1997 EIA regulations. There are more detailed requirements regarding the inclusion of the assessment of mitigation measures in the impact assessment stage and EMP requirements were laudably incorporated into law for the first time in the NEMA EIA regulations in 2006 and in NEMA in 2009.

Regrettably, there has been a legislative regression in so far as certain processes are concerned such as Scoping. It is no longer possible for a final positive decision to be made at the end of the Scoping process, as was the case under the 1997 EIA regulations, and it is submitted that this is a missed opportunity to introduce more flexibility and sophistication into the process. Brownlie and Glazewski are of the view that legislative amendment could improve the effectiveness of the EIA regime by for example, providing for 'proper scoping to inform the need for, and focus of EA'.[175] It is unfortunate that the 2010 EIA Regulations have downplayed the scoping process further, rather than expanding it to create a degree of flexibility of application and timing within the process. It is argued that the scoping process should rather be expanded to

[175] Glazewski op cit note 50 at 10-34.

include specialist studies to assist with this process. It is recommended in Chapter 5 that an 'in principle' approval at the end of the Scoping stage is a mechanism which could be employed for large infrastructure development projects, like the Gautrain Project. This could provide more certainty to project developers and financiers as to whether or not the *project concept* is likely to be accepted at as early a stage as possible. The project would still need to be assessed in detail in an impact assessment and may ultimately not be approved, depending on the nature of the detailed impacts and possible mitigation measures.

Other legislative changes, such as those relating to public participation, may have clarified and expanded procedural requirements but have not advanced the outcome of the processes nor the integration of the concepts and principles into the impact assessment process. In this case writers' comments that EIA has become 'unduly complex and convoluted and procedural detail has become more important than the quality and substance of the assessments'[176] have some merit. It is agreed that in addition to compliance with procedural requirements, it is necessary for the NEMA principles including the principles of IEM and sustainability to infuse the studies, and for public participation to be robust and meaningful.[177] It is also necessary for substantive and effective mitigation measures to be detailed. In addition, the need to move beyond 'minimising impacts to "remedying" them'[178] needs to be more apparent. In later Chapters this study also proposes more flexibility within the procedural requirements for different *kinds* of projects such as large infrastructure development projects, involving various responsible parties.

[176] Glazewski op cit note 50 at10-33 & 34.
[177] In *Earthlife Africa v Director-General: Department of Environmental Affairs and Tourism and Another* 2005 (3) SA 156 (C) para 170 it was held that an 'interested party must be placed in a position to present and controvert evidence in a meaningful way…'
[178] Glazewski op cit note 50 at 10-15.

3. Evaluating the EIA process followed for the Gautrain Project

3.1 Introduction to the Project and the EIA process

The Gautrain Project was one of 10 Spatial Development Projects of the Gauteng Provincial Government aimed at improving the economic productivity and sustainability of the Province. The planning of the Project, including a feasibility study, was announced by the then Premier of Gauteng, Sam Shilowa, in early 2000 as a Blue IQ Project.

The EIA commenced in late 2001 due to the fact that the 1997 list of activities in GN R1182 made in terms of section 21 of the ECA included 'the construction or upgrading of 'railways…..and associated structures'[179] as a listed activity which required an environmental authorisation prior to commencement. It is interesting that the currently applicable EIA regulations do not require environmental authorisation at all for the expansion or construction of railway lines where there is not an increased development footprint or where additional railway lines are placed within the reserve of an existing railway line,[180] as is the case in sections of the rail alignment in Tshwane.

The EIA process ran from late 2001 until October 2002 when the draft EIR was submitted for consideration to the competent authorities. Further details about this initial impact assessment stage are set out in the sections of this Chapter. This Chapter also explains how the EIA process (through the form of amendment applications) continued beyond the issuing of a RoD in September 2003 and then a revised RoD in April 2004, right up until about 2009, that is eight years of on-going impact assessment.

[179] Listed activity 1(d) of GN R 1182.
[180] GN R 544 of 18 June 2010, activity 53 & GN R 545 of 18 June 2010, activity 11.

The April 2004 Project RoD indicated the Description, Extent, and Location of the Activity authorized as follows:

> 'The proposed activity is the development of a high-speed rail link between Johannesburg and Pretoria and between Sandton and the Johannesburg International Airport (JIA), totalling a distance of approximately 80 km. The Johannesburg to Pretoria spine will consist of stations at the following locations: Johannesburg Park Station, Rosebank, Sandton, Marlboro, Midrand, Centurion, Pretoria and Hatfield. The Sandton-JIA spine will have the Sandton, Marlboro, Rhodesfield and JIA stations along its route….. The activity described above falls within the ambit of sub regulations 1(d), 1(i), 1(o), 2 (c) , 2(e), 8 and 10 of Government Notice R1182 (as amended) promulgated under sections 21, 26 and 28 of the Act.'[181]

Further on the RoD alludes to the details of the project (route alignment)[182] in paragraph 3.3 which is entitled 'Special Conditions' stating that the route alignment shall be as recommended in the EIA Main Summary Report and the 1:2000 aerial photographs of the Recommended Bidding Alignment…' Therefore, the main record of the details regarding the authorised route are to be found in these 1:2000 aerial photographs of the Recommended Bidding Alignment. These were not attached to the RoD, but there were voluminous plans attached to the EIA Report and used in the public meetings. These photographs and plans were largely inaccessible to the public after the formal public participation process had been completed and this was one of the challenges experienced after the EIA process was completed – there was no formal mechanism in place to make amended or final plans available to affected communities on an on-going basis. This made it difficult for them to ascertain the exact impacts on their properties and to communicate with each other, the EAP and the project team as the project progressed.

The Concession Agreement for the design, construction and operation of the Gautrain System was entered into by the Gauteng Provincial Government (GPG) and the Bombela Concession Company (Pty) Ltd (Bombela) in September 2006. The operational period covers a

[181] Paragraph 1 of the Gautrain Project RoD of 25 April 2004.
[182] Paragraph 3.3.1 of the Project RoD.

period of fifteen years from the completion of construction, after which the System will be handed back to the GPG, which remains the owner of the infrastructure throughout the concession period. The GPG employed its expropriation powers in terms of the Gauteng Transport Infrastructure Act 8 of 2001 to procure the land for the project. Bombela Concession Company (Pty) Ltd (hereinafter referred to as Bombela) entered into a number of further contractual agreements with other entities in the Bombela Consortium mainly structured around the design and construction of the system and the operation of the system. Bombela appointed a Turnkey Contractor as well as a Civil Contractor, an Electrical and Mechanical Contractor and an Operator.

The Project is a Public Private Partnership (PPP) Project in terms of Treasury Regulation 16 under the Public Finance Management Act 1 of 1999 (PFMA), as amended in 2005 and 2007. In terms of Regulation 16 a PPP is defined as 'a commercial transaction between an institution and a private party in terms of which the private party –

a) performs an institutional function on behalf of the institution; and/or
b) acquires the use of state property for its own commercial purposes; and
c) *assumes substantial financial, technical and operational risks in connection* with the performance of the institutional function and/or use of state property; and
d) receives a benefit for performing the institutional function or from utilizing the state property….. '(my emphasis)

As part of the processes for Treasury Approvals I, II and III the institution 'must submit a report for approval by the relevant treasury, demonstrating how the criteria of affordability, value for money *and substantial technical, operational and financial risk transfer were applied*….'[183] It is clear that one of the focal points of a PPP is the transfer of this 'substantial technical, operational and financial risk'.[184] One question is whether this governmental imperative is

[183] Treasury Regulation 16.5.4 regarding Treasury Approval II. The same criteria are mentioned in relation to Treasury Approval I (Regulation 16.4.1(d)) and Treasury Approval III (Regulation 16.6.1).
[184] Ibid at Regulation 16.5.4(c).

possible to achieve if the Environmental Authorisations are obtained in the name of the government institution, as was the case for the Gautrain Project. It is submitted that it is not, as risk *vis-à-vis* regulatory authorities and third parties remains with the party who is the holder of the authorisation.

The substantive changes made to the route alignment after the issue of the Project RoD, pursuant to the appointment of the Concessionaire as the 'preferred bidder' in mid-2005, and as a result of further design work as the project progressed, were authorized as amendments to the Project RoD and were therefore also authorized in the name of the Gauteng Department of Public Transport Roads and Works (GDPTRW) as the applicant. This difficulty relating to government's inability to fully transfer the risk for compliance with the environmental authorisations persisted as the project progressed and is explored further in the following section.

3.2 The Applicant

The Project RoD dated 25 April 2004 was issued, by GDACE, to the GDPTRW as the applicant. Indeed, there was no Concessionaire in existence at that time and the RoD was viewed as being necessary to offer to the international bidding teams as a 'sweetener' or draw card for them to consider investing in the Project. The Project RoD provides that,

> 'the applicant shall be responsible for ensuring compliance with the conditions contained in this letter by any person acting on his behalf, including but not limited to the Concessionaire, an agent, servant or employee or any person rendering a service to the applicant in respect of the activity, including but not limited to, contractors and consultants.'[185]

The RoD did however to some extent envisage the impending changes in the project in Condition 3.4 (c) which provided that,

[185] Condition 3.4(f) of the Project RoD dated 25 April 2004.

> 'the applicant must notify the Department, in writing, at least TEN (10) days prior to the change of ownership, project developer or the alienation of any similar rights for the activity described in this letter. The applicant must furnish a copy of this document to the new owner, developer or person to whom the rights accrue and inform the new owner, developer or person to whom the rights accrue that the conditions contained herein are binding on them.'

This is a mere notification provision and it is assumed that it does not envisage the change in the responsible person in terms of the RoD, namely the GDPTRW. The reason for making this assumption is that a change in the applicant was not supported or enabled by a statutory provision in the 1997 EIA Regulations, as is pointed out in section 2.2 above.

The Gauteng Provincial Government contractually transferred the responsibility for complying with the conditions of all Necessary Consents and Legal Requirements to the Bombela Concession Company (Pty) Ltd in the Concession Agreement of September 2006. Where the GDPTRW is still the applicant or holder of certain authorisations it is responsible vis-à-vis the relevant regulatory authorities and third parties, but would have a contractual right of recourse against the Concessionaire. However, after the Concessionaire was appointed in September 2006 and was engaged in further design and construction of the system, for which it carried the risk in terms of the Concession Agreement, the identity of the responsible person and the holder of the authorisation became confusing to I&APs, the parties to the Concession Agreement and even the regulators. This is because the main party, Bombela who was in effect applying for authorization for changes to the alignment, designing and constructing the infrastructure was not the accountable party in law or *vis-à-vis* third parties. The implications of this dichotomy and ways to address this problem in future need to be considered.

The confusion of the environmental regulators was apparent in the development phase of the Gautrain Project in that certain compliance notices and directives were issued by the Gauteng Department of Agriculture, Conservation and Environment (GDACE), the Department of Water

Affairs (DWA) and the City of Johannesburg (CoJ) directly to Bombela and its associated companies in circumstances where the holder of the authorisation was the GDPTRW. Furthermore, Bombela compiled and submitted the Draft Final Environmental Management Plan (DF EMP) revisions for the construction phase, and the Operations and Maintenance Environmental Management Plan (O&M EMP) for the operational phase, in accordance with the conditions of the RoD. However, the approval of the O&M EMP was addressed to the GDPTRW, as applicant, rather than to Bombela. This was questionable since the RoD required that the Concessionaire compile these EMPs and the Concessionaire was responsible for the implementation of the EMPs and compliance with the conditions of the EMPs. The O&M EMP approval letter from GDARD even went so far as to state that '…the O&M EMP is a binding document and should be made known to all contractors on site. As the applicant, you will be held accountable for any breach or deviation from the approved O&M EMP.'[186] In contrast, the letter of approval of the DF EMP Revision 5 for the construction period dated 23 November 2007, was addressed to Bombela and stated that 'non-compliance with the conditions of the EMP will constitute non-compliance with the conditions of the authorisation.' This is anomalous as Bombela was not the holder of the authorisation.

Until recently,[187] it was not clear whether NEMA allowed for the transfer of certain obligations or risks in these circumstances. However, now that this is possible in law, it is submitted that the holder of an authorisation in similar circumstances should formally apply for the transfer of responsibility for compliance with the whole of, or particular sections of the authorisation, to the relevant party.

[186] Letter from GDARD to Gautrain Rapid Rail Link, Department of Infrastructure Development (note that no such Department exists) dated 31 May 2010.

[187] When the NEMA Second Amendment Act came into operation on 18 December 2013 as discussed in Section 2.2 above.

3.3 The Gautrain Scoping Process

The EIA[188] process for the Gautrain alignment commenced towards the end of 2001, culminating in the issue of an initial Record of Decision (RoD) in September 2003, which was revised and re-issued in April 2004. According to the Executive Summary of the Gautrain EIA Report of 21 October 2002, [189] the initial work undertaken for the EIA from January to April 2002, which was in effect the Scoping process following publication of the reference route for the Rapid Rail Link, aimed to ensure interaction with the public along the reference route through a series of Open Days and focus group meetings after the reference route was published at the end of January 2002; as well as the identification of potential environmental impacts and their significance in terms of the specialist work required for the EIA. This assisted with the development of route alignment alternatives and the inclusion of new I&APs affected by the route alternatives. After April 2002 further public and focus group meetings were held as part of the impact assessment process. An EIA website was used for the public participation process, as well as a Background Information Document (BID).[190] Detailed plans and information on route alternatives was made available at Open Days for the public and at Focus Group meetings conducted with particular stakeholder groups.[191] Substantial changes were proposed to the alignment through the EIA and public participation processes, which considered various alternative alignments in the various areas of the proposed alignment.

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[188] Environmental impact assessment (EIA) can be defined as the assessment of the potential impacts of a proposed project on the environment, alternatives to the proposed project and measures that may be implemented to mitigate the impacts of the project on the environment; provided that 'environment' is broadly defined as in NEMA. (Adapted from section 24 of NEMA). See also the full range of definitions by various authors quoted by Glazewski op cit note 50 at 10-6.

[189] Environmental Impact Assessment for the Proposed Gautrain Rapid Rail Link between Johannesburg, Pretoria and Johannesburg International Airport Vol 1: Executive Summary 21 October 2002 at 13.

[190] Further information on the proposed changes and the BID document were made available for public access on www.gautraineia.co.za. This site was still accessible in February 2014.

[191] EIA Report op cit note 189 at 15

However, the applicant took a noteworthy 'shortcut' or made a deviation in the process – GDPTRW applied for exemption from certain aspects of the Scoping[192] phase of the EIA during the course of 2002, in terms of section 28A of the then applicable Environment Conservation Act 73 of 1989. The exemption application was approved by the GDACE. The result was that the EAP presented an 'Issues Report' to GDACE[193] rather than a Scoping Report. The Final Issues Report was dated 31 July 2002.[194] This Issues Report was followed fairly swiftly (in October 2002) by the submission of the full Environmental Impact Report required by Regulation 1183 of the 1997 EIA Regulations.

Ironically, in the writer's view, this initial part of the EIA process, which in effect was a truncated Scoping process, was one of the more robust and meaningful parts of the process in so far as public participation was concerned. Even though a proper Scoping report was not prepared, the consultation process led to more than half of the reference alignment being altered in response to suggestions by affected communities. This was especially the case in parts of Braamfontein, Sandton, Midrand and Modderfontein. The focus group meetings were particularly effective in certain areas where there were lengthy discussions with design engineers and project planners who could take suggestions by communities forward to the applicant. In other areas, such as Pretoria, alternative alignments were presented by communities through this process, which were investigated further but ultimately not accepted – usually for technical and financial feasibility reasons. It could be argued that the exemption from Scoping may have led to a more flexible substantive process in favour of a slavish adherence to form over substance.

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[192] Glazewski op cit note 50 notes that 'Scoping' is described as a procedure for identifying potentially significant issues and concerns, possible alternatives, the scale of, and approach to, a particular environmental assessment at 10-25.

[193] GDACE was later succeeded by the Gauteng Department of Agriculture and Rural Development (GDARD).

[194] Final Gautrain Project Issues Report 31 July 2002.

During this part of the consultation process certain I&APs also suggested alternatives to the proposed rail project itself. For example, it was suggested that the Super Highways Project or additional lanes on the Ben Schoeman Highway could accommodate the projected 7% per annum growth in traffic volumes and that the project was not necessary.[195] This indicated that there had been no consultation with the public at the pre-feasibility and feasibility stage when alternative projects were considered. Had there been consultation at that stage these kinds of suggestions were unlikely to have surfaced during the initial stage of the Gautrain EIA. It is submitted that this is a role which could have been fulfilled by an SEA during the pre-feasibility stage of the project which could have led to a more streamlined Scoping process and a more focused public participation process. It is also possible that an SEA could have made the project more palatable to a number of I&APs as they would have been involved from a much earlier phase of project planning and could have assisted to identify relevant issues much earlier on in the process.

There was no decision from GDARD after the completion and submission of the 'Issues Report'. In any event the competent authority could not have approved a project such as the Gautrain Project after a Scoping process. However, a decision after Scoping could have provided the opportunity for greater focus in the EIA process as a result of guidance from the authority, and this opportunity was not enjoyed in the Gautrain Project because of the exemption from Scoping. This constituted an authorised deviation from the standard EIA process, which applied at the time. However, it may also have impacted on the planning and focus of the impact assessment process which followed.

[195] Ibid.

3.4 The Gautrain Impact Assessment Process

3.4.1 The 2002 Gautrain EIA process

According to the Executive Summary of the EIA Report, further public consultation was conducted on the alternatives identified in the Issues Report, 'between 26th June 2002 and 1 July 2002 to inform I&APs of the feasible alternative route alignments that had arisen out of the public participation process and which were to be included in the EIA.'[196]

Specialist studies were conducted on these 'feasible route alternatives'. The specialist studies included flora and fauna studies, surface and groundwater studies and studies on noise and vibration, air quality, land use planning, property values, environmental resource economics, heritage resources, socio-economics, traffic and visual. [197]

The Executive Summary Report of the EIA states that the issues for investigation,

> 'were identified by means of site surveys and inspections, consultations with specialists, the authorities, the public and key stakeholders, as well as a review of existing information and relevant literature. A synthesis of the information on the above characteristics for each identified issue assisted in the determination of the potential significance of the issues. Each issue was then rated as low, medium or high, and described as positive, negative or neutral. The issue rated to be of medium to high significance received specific attention in the specialist studies undertaken during the EIA.'[198]

The findings and recommendations of the EIA Report were set out in Volume 6 of the Report where the impact assessment methodology that was used is also explained. The Report states that the EIA specialists focused their work on addressing the issues raised on the proposed project and alternative route alignments[199] by I&APs during the public participation process.[200] The Report also mentioned that 'the technical feasibility and estimated engineering costs for

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[196] EIA Report op cit note 189 at 16.
[197] Gautrain Project EIA Main Summary Report, October 2002.
[198] EIA Executive Summary Report op cit note 189 at 14.
[199] Gautrain EIA Report October 2002 Appendix 14 Vol 2C.
[200] Gautrain Project EIA Report, Vol 6: Synthesis of Environmental Impacts, Cumulative Impacts, Mitigation Measures, Conclusions and the Environmental Management Plan 21 October 2002 at 26-4.

constructing and operating the alternative alignments, calculated by the Gautrain technical team (Volume 5), have been evaluated and considered.'[201] The findings culminated in a 'Summary of Route Alternatives and Recommended Route Alignments' Report.[202] The Reports and the EIA therefore focused on route alignment alternatives in specific sections of the alignment (for example from Park Station to Sandton Station and from Marlboro Station to Midrand Station), rather than on particular impacts (on noise for example) across the entire alignment. This approach was carried forward to the comparative assessment of Bombela's variant alignments and may have led to a lack of more detailed analysis of certain potential impacts in particular sections of the project, such as, for example, geohydrological impacts - later manifesting in a tunnel water ingress problem in specific sections of the Gautrain tunnel sections and widely reported on in the media. This is a common shortfall in the assessment of linear projects where impacts must be identified along a considerable distance and there are a number of alternative alignments to consider which could give rise to different impacts. This is the reason why these kinds of projects benefit from SEA which can assist to discard alternatives, define the alignments and thereby focus the EIA to a greater extent.

The specialists could only work with the information that was available at the time and the studies documented the extent to which the findings were constrained by this limitation. For example, Chapter 23 of the EIA report[203] which covered the geohydrological issues recommended more detailed geohydrological investigations prior to the commencement of construction due to the limited project and geotechnical information available for the tunnel sections in 2002.[204]

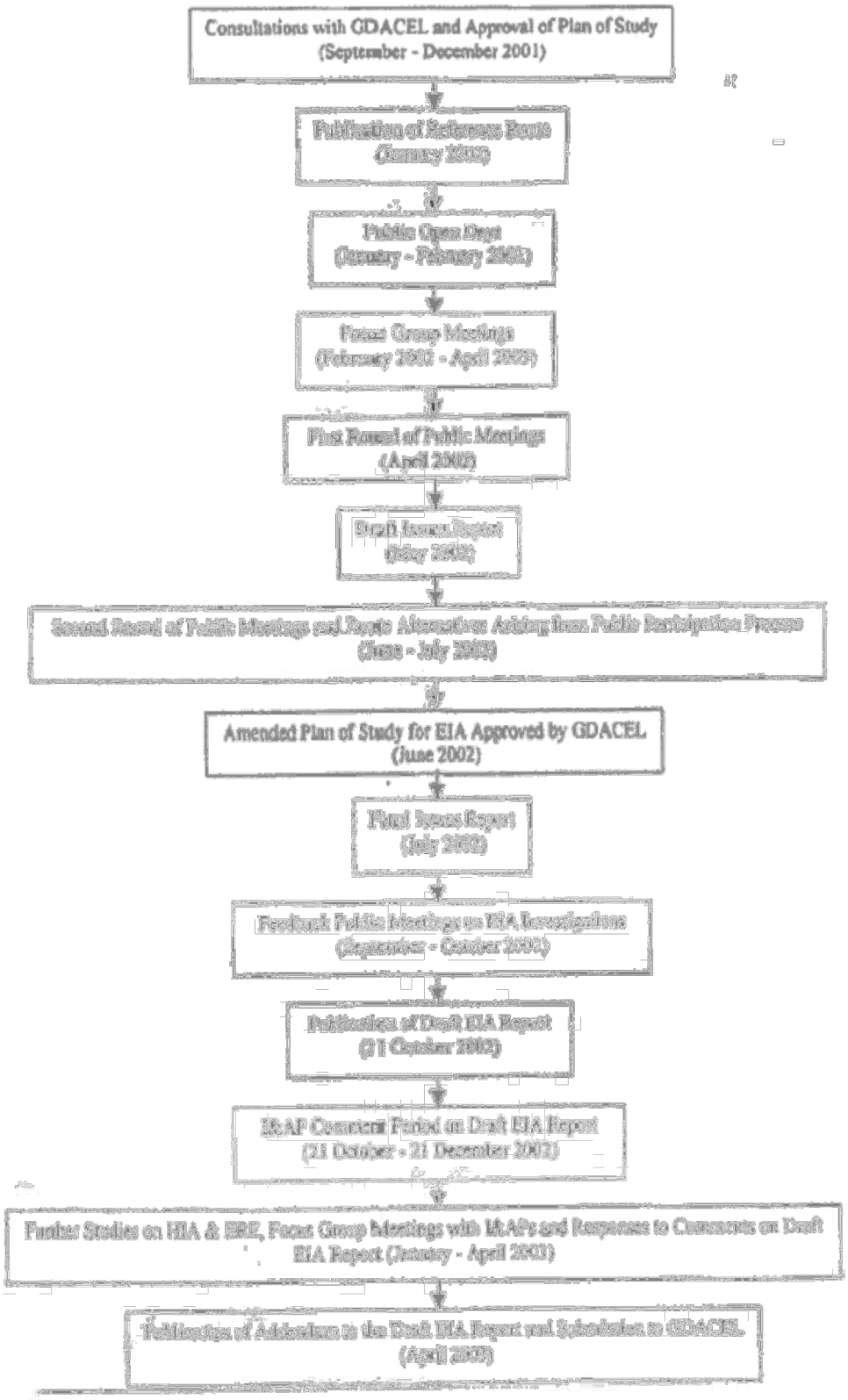
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[201] Ibid at 26-5.
[202] Ibid at Table A1.
[203] Gautrain Project EIA Report, Vol4 CH23: Groundwater, Geological and Geohydrological Study.
[204] Ibid at 23-35 & 36.

Further to the specialist studies submitted as part of the EIA Report of October 2002 further specialist studies and submissions were prepared at the request of GDACE and included in an Addendum Report dated April 2003. The Addendum Report included an Environmental Resource Economics (ERE) Study and a Phase 2 Heritage Impact Assessment on the recommended alignment from Pretoria Station to Hatfield Station compared to an alternative alignment, as well as further traffic impact studies and the record of public comments on these further reports and the Draft EIA Report. This suggests that the initial EIA reports were not as comprehensive or wide ranging as GDACE had anticipated and that the impact assessment could have benefitted from a greater level of planning, notwithstanding of the Plan of Study for EIA. It is submitted that the need for additional studies such as the ERE study would have been apparent at an earlier stage had an SEA process or a comprehensive Scoping process been conducted. A summary of the EIA and public participation process followed for the Gautrain EIA is set out in the flow diagram below taken from the Addendum to the EIA Report dated April 2003, Chapter 2, Synthesis of Environmental Impacts page 2-3.

Source: Addendum to the EIA Report dated April 2003, Chapter 2, Synthesis of Environmental Impacts page 2-3.

FIGURE 2.1 EIA AND PUBLIC PARTICIPATION PROCESS FOR THE GAUTRAIN PROJECT



A RoD was first issued at the end of September 2003. More than 50 appeals were lodged against this RoD and the MEC issued a revised RoD for the Gautrain Project on 25 April 2004. The revised RoD specified an expanded and more detailed EMP process, including a public participation process. Therefore, even after the extensive public participation conducted during the EIA process, further consultation was required.

The Court in *Muckleneuk/Lukasrand Property Owners and Residents Association (MLPORA) v the MEC: GDACE and others*[205] made the following comments about the Gautrain EIA's public participation process and the extension thereof:

> 'It is plain from all the papers in this matter that the management of the environmental requirements of the Gautrain project is an extremely complex one. There are many I&AP's. Although in general everybody is in favour of the project it is clear that most people would be pleased if the railway line does not go past their property too closely. That was anticipated by Gautrans. The ECA and EIA regulations do not prohibit the procedure adopted. It makes sense and allows for full public participation to the end.'[206]

The court furthermore acknowledged that mitigation measures had not been properly determined at the time the RoD was issued.

> 'In the result the answer to the applicants' contention that the authorization was not lawful because of the failure to define the mitigation measures, is twofold. In the first place the construction of the project has not yet been authorized and secondly it is clear that it will not be authorized until mitigation measures have been properly determined, after a further process of public participation.'[207]

Technically therefore the EIA did not comply with the ECA regulatory requirement applicable when the EIA was conducted that the 'possibilities for mitigation of each identified

[205] *MLPORA* case op cit note 2.
[206] *Ibid* at para 39.
[207] *Ibid*.

impact' be described.[208] Consequently there would also have been non-compliance with NEMA's section 24(7)(c) which required the investigation of mitigation measures.

And further in paragraph 43:

> 'The situation is simply that the MEC has given reasons for her decision. She said that although many alignments were suggested and examined and that some of the appellants contended that some of the alignments were not optimal she was satisfied that the evaluation done by GDACE caused the best choice route to be authorized, *taking all economic, social and environmental factors into account. She regarded it as sensible to defer defining mitigation measures until detail planning had been done and after a further draft EMP had been made available to I&AP's and open and transparent public participation had taken place.* The revised RoD itself was clear that it did not authorize construction until the mitigation measures were finalized and that failure to comply with the conditions imposed may lead to withdrawal of the authorization. *The reasons supplied by the MEC made it clear that there was an evaluation process where economic, social and environmental factors were considered in selecting the best alignment.*'(my emphasis)

The Court therefore viewed the RoD as being conditional rather than a final approval and placed much reliance on the EMP process as well as on the public participation process as part of the EMP process. The Court also unwittingly pre-empted the principle to be established later in the *Fuel Retailers* case[209] that the consideration of socio-economic factors by authorities is an integral part of their environmental responsibility.

3.4.2 The Gautrain Amendment processes

On 2 July 2005 the Bombela Consortium was announced as the preferred bidder for the Gautrain Rapid Rail Link Project. Further environmental authorisation amendment applications were required as a result of the variant alignments proposed in Bombela's Best And Final Offer (BAFO) Bid and pursuant to further design work.

A Background Information Document (BID) dated October 2005 entitled 'Gautrain Rapid Rail Link Further Environmental Investigations' briefly explained the process that was to

[208] GN R 1183, Regulation 8(b).
[209] 2007 10 BCLR 1059 (CC) para 61. This case is also discussed in 2.4.1 above.

be followed and indicated that there were to be changes proposed to the following 'variant alignments' –

- the raised viaduct approach to the then named Johannesburg International Airport (JIA), now OR Tambo International Airport;
- the tunnelled alignment in Sandton;
- the Marlboro alignment;
- construct a viaduct structure through Centurion;
- move the alignment to the side of Salvokop, instead of going through it;
- move the alignment into the existing South African Rail Commuter Corporation (SARCC) rail alignment in Pretoria, between the Pretoria Station and Hatfield; and
- Various 'minor amendments' to the alignment in most of the other sections of the alignment, particularly the tunnelled alignment.[210]

According to the BID document the objective of the variant alignments were to optimise the network from a design, operational and financial perspective. In addition, it was submitted that the variants would introduce a number of positive anticipated environmental benefits.[211] An Approach Document[212] regarding the applications to GDACE for proposed changes to the rail alignment and for the amendment of the RoD was prepared and submitted to GDACE prior to the submission of the amendment applications. The Approach Document describes the variant alignments proposed by Bombela's design and technical team in more detail. It is stated in the Approach Document that the applicant, namely GDPTRW will apply to GDACE for

[210] GDPTRW had also proposed minor changes to the alignment which are described on pages 7 and 8 of the BID.
[211] Background Information Document (BID) 'Gautrain Rapid Rail Link Further Environmental Investigations' October 2005 Brochure at 2.
[212] Bohlweki Environmental and Felehetsa Environmental 'Approach Document regarding the applications to GDACE for proposed changes to the rail alignment and for the amendment of the RoD dated 25 April 2005' (25 November 2005).

authorisation in terms of Regulation 9(3) of GN R 1183[213] read with conditions 3.4(a)[214] and 3.4(b)[215] of the RoD and that this approach had been approved by GDACE.[216] Condition 3.4(a) was cited in addition to Regulation 9(3) to cover any potential changes to the 'Project Description' since Regulation 9(3) only permitted changes to 'conditions'.[217]

Most of the amendment applications for the variant alignments were submitted to GDACE in or about March 2006. The exception was the amendment application for the Centurion variant alignment which was submitted on 9 June 2006. The delay was as a result of a High Court application which was brought by the Centurion Association for a Reasonable Environment (weCARE) who sought an interdict compelling the provision of further information on the variant alignment in Centurion and its impacts and to prohibit the submission of the final comparative environmental assessment report until such time as various information provision conditions had been met.

Pursuant to these applications amendment RoDs were issued for the Gautrain Project in terms of the 1997 EIA Regulations for Minor Route Amendments,[218] and the Marlboro Sandton and Rhodesfield Variant alignments were issued on 15 August 2006.[219] Three so-called 'Northern Variants' were issued on 15 December 2006 for the Salvokop area in Pretoria, the section from Pretoria Central Station to Hatfield Station and for the alignment in Centurion.

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[213] Regulation 9(3) of GN R 1183 states as follows: 'The relevant authority may, from time to time, on new information, review any such condition determined by it as contemplated in sub regulation (1) (a), and if it deems it necessary, delete or amend such condition, or at its discretion, determine new conditions, in a manner that is lawful, reasonable and procedurally fair'.

[214] Condition 3.4(a) states that: 'Any changes to, or deviations from, the project description set out in this letter must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations.'

[215] Condition 3.4(b): 'This Department may review the conditions contained in this letter from time to time and may by notice in writing to the applicant, amend, add or remove a condition.'

[216] EIA Report op cit note 189 at 5.

[217] This is discussed in detail in section 2.4.2 above.

[218] Reference GAUT 002/2/35 dated 20 March 2006.

[219] These were 3 separate authorisations all issued under Reference GAUT 002/2/35 and became known as the 'Southern Variants'.

Thereafter, six further amendments were issued in terms of the 2006 EIA Regulations and their amendment provisions[220] authorizing further changes to the Gautrain alignment.[221] Of these six amendments, two related to the Technopark area where changes were authorised and the applicant later chose to revert to a previously authorised alignment when the costs for authorised changes proved to be unexpectedly high.[222]

It is apparent from the extent of amendments to the alignment approved in 2004 that the design of the Project changed substantially as a result of the progression of design and planning work. Where there were still further changes to already amended alignments such as the tunnel alignments[223] and the alignment in Technopark,[224] it was even more apparent that environmental impact assessment work had preceded detailed design and planning. This demonstrates that when impact assessment work is done *prior to* detailed planning and design having been completed, it is likely to lead to the repetition of work and the extension of costly assessment processes. This also increases the risk of changes not being authorised, and of appeals or court challenges against the new authorisations, which may result in them being set aside.

One of the difficulties encountered on linear projects of this nature is that due to the scale of the construction and the required rate of construction progress it is not always possible or practical to submit detailed programmes or plans for activities prior to the actual commencement

[220] Discussed in section 2.4.2 above.
[221] These included the Zonkizizwe Authorisation Reference 002/07-08/NO594 dated 10 December 2007 and two further amendments to the tunnel alignments between Shaft E2 and the Rosebank Station ((Tunnel Boring Machine(TBM) tunnel) Reference GAUT 002/08-09/NO200 dated 15 October 2008 and the alignment of the Tunnel from Park Station to Tenth Street and from Rosebank Station to Marlboro Portal (the Drill and Blast tunnel) Reference GAUT 002/08-09/NO801 dated 20 February 2009.
[222] Authorisation for the Amendment of Authorisation for the Centurion Variant Route Alignment (Technopark Variant Route Alignment) (Reference GAUT 002/07-08/NO465) dated 28 August 2007 and then a further authorisation for the Technopark alignment (Reference GAUT 002/07-08/NO465) dated 17 November 2008.
[223] The tunnel alignments approved in 2004 were amended in the 'Minor Amendments' application in 2006 and again in 2008 and 2009.
[224] See note 219.

of construction. Furthermore, there are usually major delivery deadlines which influence the impact assessment process and in this case also the EMP process.

3.5 The EMP Process

At the time the Gautrain EIA process commenced draft EMPs were included in EIA submissions to the competent authority as 'best practice'. A draft EMP was therefore included in the Draft Environmental Impact Report (Draft EIR) for the Gautrain Project submitted to GDACE in October 2001 and was later termed EMP Revision 1.The Project RoD of 25 April 2004 incorporated a further and very onerous set of EMP procedural and substantive requirements which were not required by legislation at the time.[225]

[225] Condition 3.3.3.1 of Project RoD dated 25 April 2004.

EMP – Process for Submission and Amendments (as amended) –

Source: Clause 3.3.3.1 of the Project RoD of 25 April 2004

EMP REVISION	*EMP COMPONENT FOR SUBMISSION*	*SUBMISSION REQUIRED*		*DACEL ACTION*
		EMP STANDARD	*METHOD STATEMENTS*	
Revision 2[226]	Design	Yes	Preliminary, based on conceptual designs prepared by the concessionaire bidding teams	Approval of EMP standard. Comment on preliminary method statements.
	Construction	Yes	Preliminary, based on conceptual construction methods prepared by the concessionaire bidding teams	Approval of EMP standard. Comment on preliminary method statements.
Draft Final	Design	No	Draft final, based on final design prepared by the appointed concessionaire	Approval of Draft Final Design EMP
	Construction	No	Draft Final, based on construction methods prepared by the appointed concessionaire	Approval of Draft Final Construction EMP.
Draft Final	Operation and Maintenance	Yes	Draft Final, based on preliminary operating procedures prepared by the Concessionaire.	Approval of Draft Final Operation and Maintenance EMP.

[226] *'Revised EMP to be submitted to DACEL'* DACEL is another acronym for GDACE.

An EMP Standard was required to be developed prior to embarking on the process set out in the above table.[227] The Standard document was required to link 'the standard against which the effectiveness of management of each impact will be measured' to key project activities and/or anticipated impacts and to indicate the parties responsible for implementing each management measure.[228] Clause 3.3.5.3 of the Project RoD also states that these Standards must meet the standards set in applicable South African law and policy and where there is no such law or policy then international best practice must be followed. The Table above indicates that the EMP process must distinguish between the design, construction and operation & maintenance phases of the project.[229]

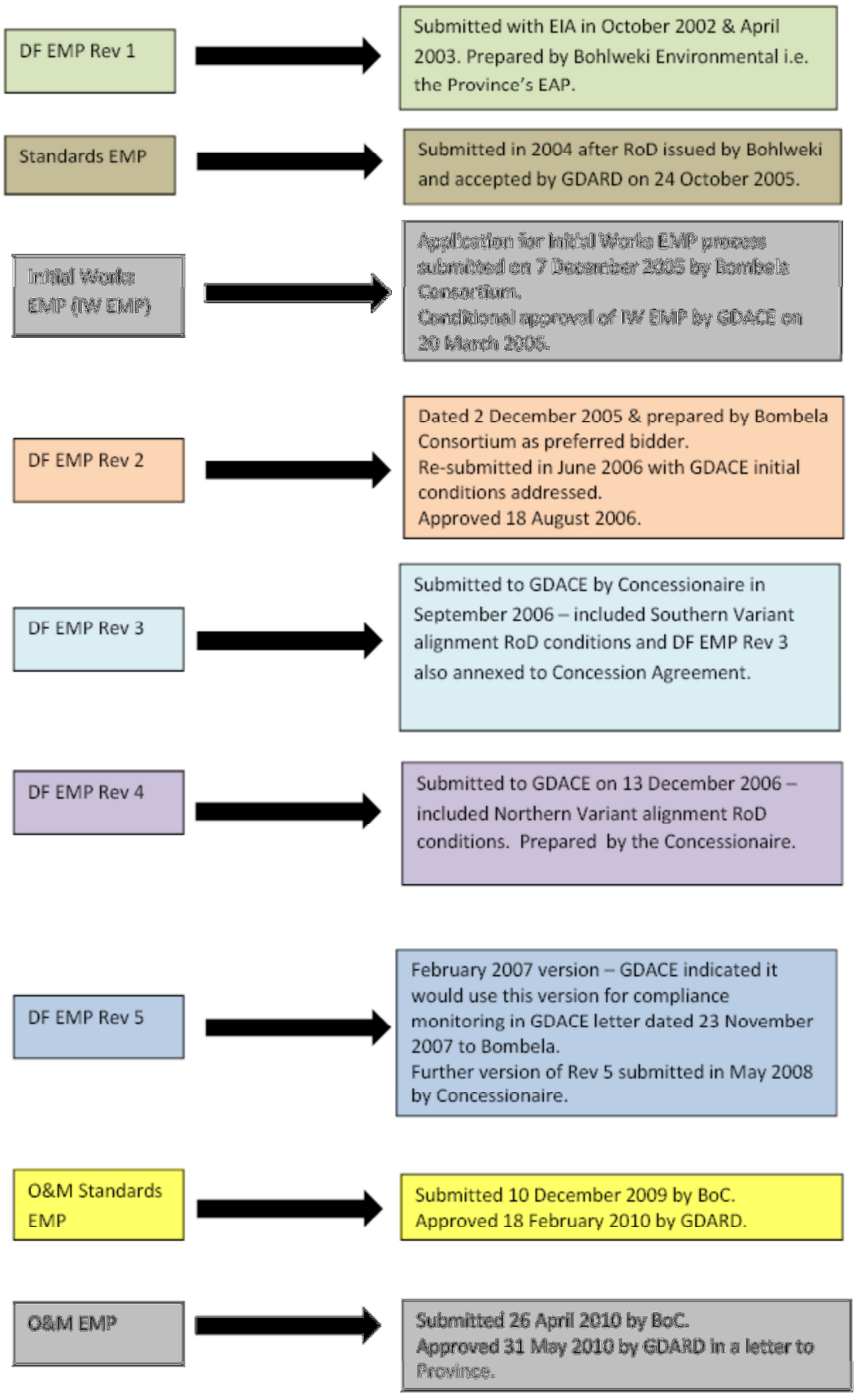
The Project RoD indicates that Method Statements[230] are required to be included in the EMP. The Draft Final EMPs were also required to be prepared in consultation with Affected Parties and the relevant regulatory authorities[231] and to be made available to other registered stakeholders for comment for a period of at least 30 days. An appeal period was specified for the EMP process and it was stated that no construction could commence until the appeal period had lapsed and the MEC had decided the appeal.[232]

I have summarised the implementation of the Gautrain EMP processes in my flow diagram below. It should be noted that implementation of the EMP development process prescribed in the Project RoD spanned from 2002 to 2010 and that at least six EMP

[227] Clause 3.3.2.1 (a) of the Project RoD.
[228] Ibid.
[229] Clause 3.3.2.2 of the Project RoD.
[230] Referred to as 'Management & Mitigation Plans' in Section 4.4.9 of the Draft EMP. In terms of Clause 3.3.2.1 (b) of the Project RoD the 'Method Statements are to describe the specific and detailed methods that will be used to comply with the EMP standard. The method statements for the EMP must initially be prepared using preliminary design information developed during the bidding phase of the project. The method statements will require updating and revision once the design is completed and as construction progresses.'
[231] Clauses 3.3.3.2 & 3 of the Project RoD.
[232] Clauses 3.3.3.8 &10 of the Project RoD.

authorisations were issued by GDARD. This is a significant period of time and indicates the heightened requirements for the EMP process in the Gautrain Project RoD and, it is argued, the regulatory authority's over-regulation of the EMP process. It is argued that this over-regulation of the EMP process may have stemmed from the regulator's lack of confidence in the level of detail of the findings of the impact assessment and the specification of the mitigation measures due to the fact that the EIA was completed prior to a Concessionaire being appointed to design, build and operate the project and due to the unavailability of key information at that stage regarding design and implementation issues such as the nature of the rolling stock, detailed design and final construction methods.

Summary of Gautrain EMP Processes with Timeframes



The Construction Method Statements, on which much emphasis is placed in the Project RoD, were not appended to the various versions of the EMP that were made available for public review. It is submitted that these documents would have provided the public with much needed information regarding detailed construction related impacts such as noise, working hours, traffic interruptions and dust which were not and could not have been covered in the EIA. This was possibly a lost opportunity by Bombela to make the EMP more responsive to the needs of impacted communities. In terms of Clause 3.3.6.6 of the Project RoD, the Construction Method Statements were required to be submitted to GDACE/GDARD in compliance with Section 3.3.3 of the Project RoD. It is therefore not clear why these were not made available for public comment and information.

Public participation for the project became more area specific during the amendment application and EMP processes. To some extent this may have fuelled the 'Not in my backyard'[233] approach that certain of the I&APs adopted.[234] They supported the overall project but not the alignment in their areas. A countervailing view is that this carving up of the alignment for impact assessment purposes in the amendment and EMP processes, allowed for more focused and detailed consultation with particular affected parties on issues of direct concern to them. Murombo states that, 'to be effective, participation must not be a once-off event, but a sustained iterative process…'.[235] The consultation was sustained but each round presented what were in some areas substantial changes, and many I&APs were literally baffled

[233] In practice this is referred to as the acronym 'NIMBY' (Not in My Backyard), meaning that the proposed project *per se* is not opposed, only the situation of the project in close proximity to the affected or objecting party. This is a good illustration of the competing interests of I&APs where the NIMBY approach could result in new or other I&APs being affected if the project location were to be moved. A number of the alternative Gautrain alignments presented by certain I&APs in Pretoria could have led to impacts on newly affected I&APs.
[234] Uys op cit note 63.
[235] Murombo op cit note 55.

by the extent of change and fatigued by the on-going consultation processes. Aregbeshola[236] presents the view that, 'public consultation on the design of the project took place only after the project had been approved and… …if the public comes to the realisation that their input is disregarded, this may lead to legal proceedings being brought against the project proponent.'[237] His study found that the public participation improved by 2008, i.e. after the project had been approved in 2004, but when more detailed design information was available.[238] Legal proceedings were indeed instituted by four groups of stakeholders in Pretoria, Centurion, Dunkeld and Modderfontein. A discussion of the judgment in the litigation by the affected residents in Pretoria follows below.

3.5.1 High Court decision on the Gautrain EMP process

A full bench of the Transvaal Provincial Division considered the significance of the EMP process determined by the MEC in the Project RoD in the unreported 2006 decision of *Muckleneuk/Lukasrand Property Owners and Residents Association (MLPORA) v The MEC: Department of Agriculture Conservation and Environment, Gauteng Provincial Government and others.*[239] The decision confirms that the approach in the Project RoD was to supplement the EIA through the EMP process.

In this matter the Muckleneuk/Lukasrand Property Owners and Residents Association (MLPORA), after an unsuccessful internal appeal to the MEC against GDACE's positive RoD, took on review the decision to approve an alignment of the Gautrain through the suburb of Muckleneuk. One of the grounds of the review was that the decision of the MEC was reviewable

[236] Aregbeshola et al op cit note 62.
[237] Aregbeshola et al op cit note 62 at 1285.
[238] Aregbeshola et al op cit note 62 at 1284.
[239] *MLPORA* case op cit note 2.

as clear measures to mitigate, control and manage environmental impacts or to rehabilitate the environment were not set out in the decision, which instead deferred the imposition of mitigating measures to be dealt with in the EMP, when the EIA regulations did not even provide for an EMP process.[240] 'The argument is that in any event such a procedure is irreconcilable with environmental conservation legislation in that before the decision-maker can exercise its discretion it has to know whether the negative impacts can be mitigated or not.'[241]

The judgment refers to the affidavit of Jack van der Merwe on behalf of Gautrans where he had stated that, as paraphrased by the judge-

> 'He says that the practical way to handle a project of this nature is to obtain a conditional authorization, which will not entitle the applicant to start with construction but will enable it to first do the preliminary design and thereafter the detailed design to fulfil the conditions laid down in the conditional authorization. He maintains that the result is truly integrated planning done in sympathy with environmental requirements. The ROD is such a conditional design. He states that in this case the extent and significance of the identified environmental impacts were described in the EIR and the measures for mitigation thereof were contained in the draft EMP accompanying the EIR. The HOD found that although there were social and environmental impacts associated with the revised route alignment 6fd they could be contained within acceptable limits subject to appropriate environmental management of the project during the design, construction and implementation stages. It was not possible to give specifications of the mitigation measures until the detailed planning of the project was completed. No one of the impacts was regarded as fatal. The authorization provided for an extra phase of public participation namely before approval of the EMP which would entitle the concessionaire to start with construction.'

This then was the explanation and justification for the EIA and EMP process which the court adopted. The RoD was accepted as a conditional approval. The project proponent or applicant was bound to follow and comply with the process that had been prescribed in the Project RoD. The judgment also referred to the likelihood of changes to the original planning being necessary,[242] as experience had shown by that stage, which showed that there was an

[240] *MLPORA* case op cit note 2 at para 31.
[241] Ibid.
[242] *MLPORA* case op cit note 2 at para 33.

appreciation for the dynamic nature of these kinds of projects and the progressive design development.

It is argued above that EIA and EMP processes are different processes, each with its own functions and purposes. One is not meant to supplement or augment the other as is suggested in this judgment, but rather to complement each other. It is submitted that in projects where there will be a time lapse between project environmental approval and detailed design, the EIA process itself should rather be re-designed to take the reality of delayed detailed design into account. Potential alternative approaches to the EIA process are proposed in Chapter 5 below.

3.5.2 The updating of the Gautrain EMPs

However, a clear process for interim changes to the Construction EMP or Operations & Maintenance EMP was not specified in the RoD, which was an oversight, as by the time these documents were ready to be amended, regulatory provisions for amendments to EMPs were in place but it was arguable whether or not they were applicable to the Gautrain EMPs.

It is worth considering whether any further amendments to the Gautrain EMPs would need to be effected in compliance with the NEMA EMP amendment requirements. Regulation 46(6)(a) of the NEMA 2010 EIA regulations states that the competent authority may, 'in the case of an application to amend an environmental management programme *that was approved in terms of the Act* through the issuing of an environmental authorisation, refuse the application or approve the application by issuing an addendum to the relevant environmental authorisation…'(my emphasis). It is not clear whether decisions on the amendment of EMPs are limited to only those EMPs that were initially approved in terms of NEMA.[243] The Gautrain RoD was issued in terms of the ECA and although NEMA was in operation when the RoD was issued in April 2004, indeed the RoD

[243] The Act is defined in GN R 543 to mean NEMA.

refers to the NEMA principles, the EMP provisions in NEMA were not yet in effect.[244] The Revision 5 Construction DF EMP for the Gautrain Project was approved by GDACE in on 18 August 2006, also prior to s24N of NEMA coming into operation. However, the Operations and Maintenance EMP was approved on 31 May 2010 and the written approval does not specify that the EMP is approved in terms of NEMA. It states that the EMP is approved in terms of condition 3.3.8 of the RoD of 25 April 2004. Furthermore, the approval pre-dates the 2010 EIA regulations coming into effect in the August of that same year. It is therefore arguable that the process for future amendments to the O&M EMP for the Gautrain Project would not need to be strictly in compliance with Regulation 46 of the 2010 EIA Regulations under NEMA.

It is noteworthy that the DF EMP for the construction period was not updated post 2008, in light of the fact that the DF EMP Rev 5 commits the Concessionaire to manage the DF EMP as a 'live document, which will be reviewed, revised or updated as required during the life of the project.'[245] The O&M EMP for the operational period had also not been revised or updated since 2010, at the time of writing. This is a perceived shortfall of the EMP process prescribed in the RoD and perpetuated by the restricted wording in the current EIA regulations in so far as the formal amendment of EMPs is required.

3.6 Conclusion

The exemption from the Scoping process in the 1997 EIA regulations and the multiple amendment processes, which were required after the Project RoD had been issued and the Preferred Bidder had been appointed, are seen as flaws of the Gautrain EIA process. This led to the extension of impact assessment on the project from the end of 2001 until about 2009. It also

[244] S24N of NEMA was introduced by NEMA Amendment Act 62 of 2008 which came into effect on 1 May 2009.
[245] Draft Final EMP for the Design and Construction Period of the Gautrain Project dated May 2008.

led to a prolix EMP process which spanned 8 years and which was designed to attempt to supplement the EIA due to insufficient information being available at the time the original EIA was conducted. The other important aspect was the confusion in roles and responsibilities between the Province, who was the applicant in the initial RoD and the Revision 1 EMP, and the Concessionaire who then practically performed the design work that resulted in its variant alignments and multiple amendment processes; as well as the compilation and submission of the various EMPs.

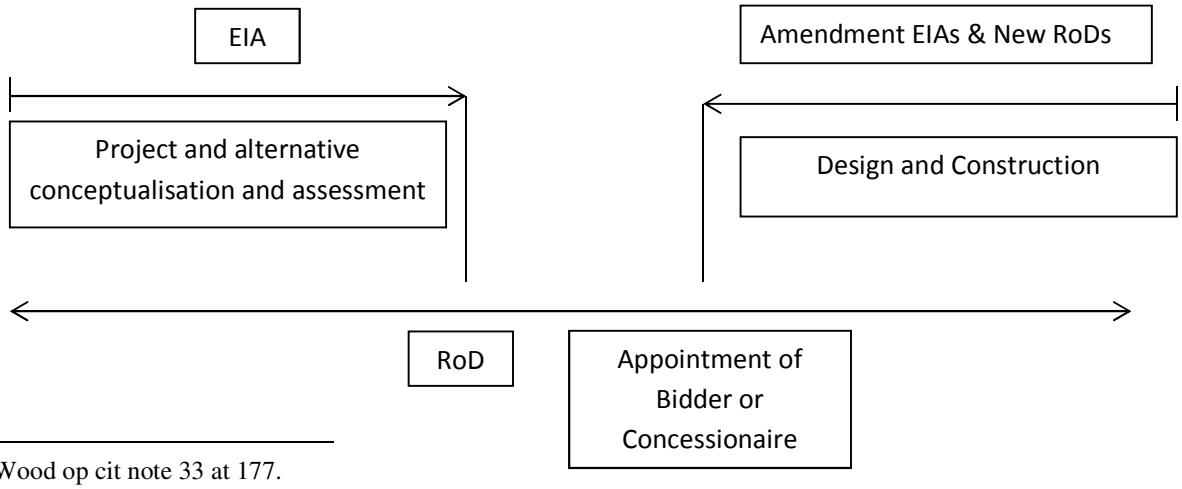
Scoping is a key component of the EIA process because it defines the issues for assessment in the impact assessment. Rather than being contracted, as it was in the Gautrain EIA, it should be expanded to include *inter alia* specialist studies so that either a refusal of the project or an 'in principle' decision favouring the further detailed assessment of the project may be made after the scoping process. The purpose of public participation is significantly undermined when the competent authority issues a positive RoD before the details of the project are finalised (as happened with Gautrain). The result is that the project has already received the imprimatur of the competent authority before the public are fully consulted. Such an approach undermines not only the value of public participation, but also the public's trust in the consultation process. The Gautrain approach also logically prevents a 'no go outcome'. A far preferable approach is doing expanded scoping first, with public participation and then detailed impact assessment, again including public participation, when all of the details are available. Alternatively, alternatives could be assessed in an SEA, which would incorporate public participation and specialist studies to identify issues to guide the EIA and thereby defer the impact assessment to the appropriate time.

Detailed information concerning the impacts may only be known at the stage of detailed and final design. It is at this stage that detailed impact assessment should be done. Wood recognises that impacts change throughout project development and as design work progresses; he therefore opines that EIA should be completed as late as possible and be based on the most developed design - not the design from the project conceptualisation phase - and that there should be some acceptance of further design changes.[246] The EMP process should not be used to identify impact and mitigation measures.

Impact assessment should be done by the party that will ultimately carry the risk and responsibility for the construction of the project and provision should be made for a change in the party responsible for conducing different parts of the EIA process and project construction and implementation.

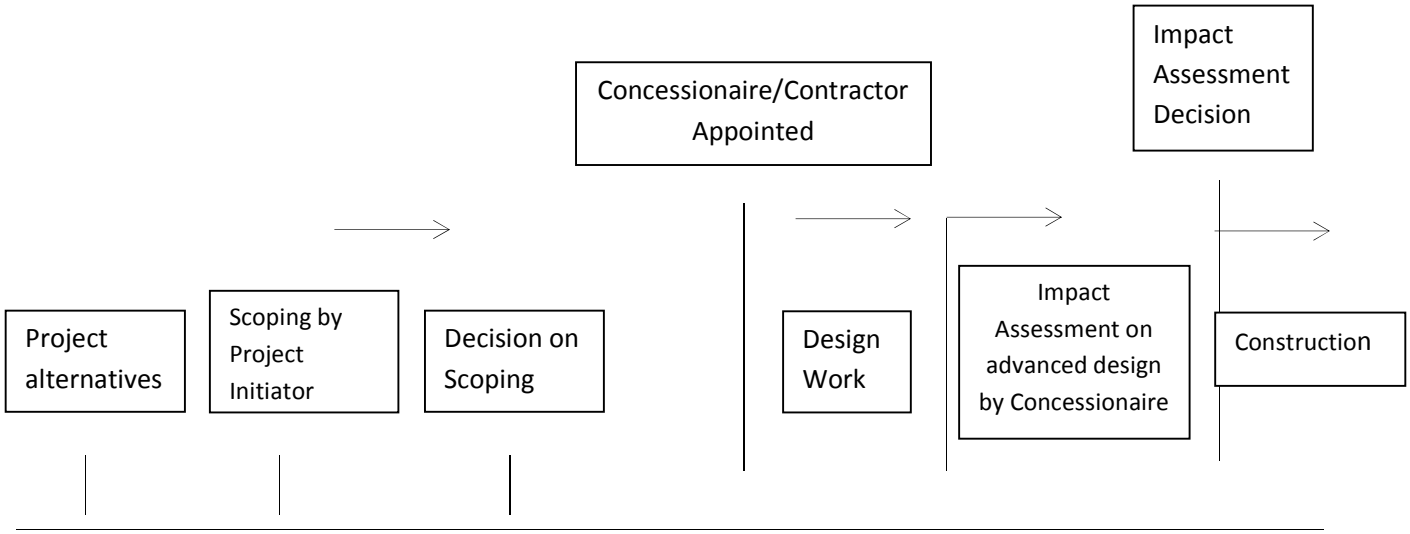
The following continuums reflect and juxtapose the process actually followed in the Gautrain impact assessment with a proposed process for the timing of the detailed impact assessment phase in relation to the appointment of the Concessionaire, the design process and the start of construction.

Continuum A illustrating timing of Gautrain Impact Assessment Process



[246] Wood op cit note 33 at 177.

Continuum B illustrating suggested timing for Impact Assessment Processes



The proposed process on Continuum B reflects cost and time savings in the impact assessment process itself, although it does not necessarily lead to an earlier start to construction. In fact, the start of construction may well be delayed somewhat due to additional time allocation for more detailed designs to be developed which the impact assessment studies will be based on. However, it is submitted that this slight time delay will ultimately lead to cost and time efficiencies, through better planning and design processes and, fewer amendment EIA processes after the final Project environmental authorisation has been issued. Further amendments may well be necessary but they are likely to be significantly less substantive and numerous.

4. Other potential solutions – Infrastructure Development Bill and SEA?

The process-related problem in the Gautrain EIA of completing the initial impact assessment when there was insufficient design information to finalise the alignment (and therefore the EIA process) and to inform the selection of appropriate mitigation measures was not remedied by the Amendment process or the EMP process as intended by the Project RoD. What enabling conditions or mechanisms could be devised or utilised to address these process-related flaws?

Retief and Kidd state that 'exploring the cost of EIA is particularly relevant within the South African context, where calls have been made at a high level for the reconsideration of the need for EIA, based on the perceived associated costs and time delays affecting job creation and economic growth…'[247] and that EIA has had a major influence on developmental processes in South Africa. The practice of EIA in South Africa has unfortunately led to criticism by developers and politicians as being costly and as delaying the implementation of much needed development.[248] Furthermore, in Chapter 19 of his book on Strategic Environmental Assessment (SEA), Wood refers to an 'emerging awareness that project EIA may occur too late in the planning process to ensure that all the alternatives and impacts relevant to sustainable development goals are adequately considered.'[249] He states that the application of SEA is 'widely perceived to have the potential to streamline and strengthen project EIA and to contribute towards the aims of sustainable development.'[250]

These views indicate that there may be potential limitations on the usefulness of EIA as a value adding tool for achieving sustainable development, if weaknesses in the EIA system are not addressed. This is because the risk that the process may be side-stepped, shortened or

[247] Kidd & Retief op cit note 123 at 1043.
[248] Ibid at 1047.
[249] Wood op cit note 33 at 331.
[250] Ibid.

dismissed in the face of urgent development requirements, looms ever larger, as is evidenced by the Infrastructure Development Bill[251] covered in this Chapter. The Infrastructure Development Bill sets out a contracted approach to environmental assessment and public participation in large infrastructure developments projects, which would include projects such as the Gautrain Project.

4.1 Infrastructure Development Bill[252]

Government's proposed manner of expediting future Strategic Infrastructure Development Projects such as the Gautrain, through the Infrastructure Development Bill, calls for critical analysis.[253] It is submitted that the Bill, presented as the panacea by government for all designated 'strategic integrated projects', will not remedy the EIA process related problems identified in the previous Chapters.

The Infrastructure Development Bill has proposed a system for managing designated 'strategic integrated projects' such as the Gautrain Project. However, the proposed framework and mechanisms in the Bill will not necessarily promote sustainable development. They are more likely to bring pressure to bear on environmental authorities to fast track and approve projects, which but for the Act (once it is passed), may not have been authorised. There is no mention of the need for sustainable development in the implementation of these projects in the Bill, but only a perfunctory reference to the need to comply with NEMA. The question is whether this will be possible in light of the other provisions in the Bill.

The Bill provides for the 'facilitation and co-ordination of public infrastructure development which is of significant economic or social importance to the Republic.'[254]

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[251] The Bill was initially published in GG 36143 of 8 February 2013 for comment. A revised Bill was then published on 30 October 2013 in GG 36980 just prior to being submitted to Parliament for consideration.
[252] Ibid.
[253] The comments in this section have been drawn from an article the writer published in *Environmental Management* Vol 8 No 4 (July/August 2013) on the February 2013 Draft Infrastructure Development Bill.
[254] Preamble to the October 2013 Bill.

Designated 'strategic integrated projects' are defined to mean 'a *public* infrastructure project or group of projects contemplated in section 7'. These may include, as per the list in Schedule 1 to the Bill, the expected public projects such as airports, education and health care institutions, public roads, ports and harbours, power stations, railways, human settlements, waste management and disposal, water works and infrastructure etc. However, the list notably includes private sector type projects such as mines and communication and IT installations. On the face of it private sector projects which fall into a group, or private partners in public private partnership projects, that are designated as 'strategic integrated projects', could be in a position to benefit from the powers of expropriation conferred on the Commission in the Bill. The potential for bribery and corruption to expedite certain private sector projects via this channel abounds, and with the President at the helm of the Presidential Infrastructure Coordinating Commission political pressures will be felt. Only a civil servant of extraordinary courage is likely to be able to refuse an authorization of a project which has been placed on the President's list of pet projects.

The Bill's focus is on making sure the projects are delivered expeditiously, so expeditiously that periods of time are dictated in Schedule 3, which total 250 days from the time of project approval to the regulatory decision. Full EIA would usually be required for projects of this nature. Do the time periods in Schedule 2 include the EIA process? If so, it is difficult to understand how the NEMA EIA Regulations will be complied with as the time periods specified are likely to be insufficient for the EIA process. In addition, the Bill specifically states that these timeframes may not be exceeded. The race seems to be to ensure that authorisations are obtained prior to the tender process being undertaken, when many large public private partnership projects, such as the Gautrain Project, have demonstrated that this may not be the wisest course

of action, particularly in so far as environmental authorisations are concerned. As set out above, in large-scale infrastructure development projects such as the Gautrain Project, detailed information concerning the impacts of the projects is only known at the stage of detailed and final design, that is, long after the tender process. It is at this stage that full impact assessment should be done by the party that will ultimately carry the risk and responsibility for the construction of the infrastructure. The legislature needs to reconsider the implications of this 'rush to implementation' more carefully, in order to avert the risk of compromising due process in necessary authorization applications and of compromising the sustainable development of these projects and our country.

The Bill proposes that Steering Committees be appointed for each designated 'strategic integrated projects' which may in terms of s 12(1)(a) include, 'officials representing departments in the three spheres of government responsible for environment, water, public works, finance, economic development, spatial planning and land use management or any other relevant portfolio or representing any other person who will be required to grant an approval, authorization, exemption, licence, permission necessary for the implementation' of these projects. These members will have 'the authority to take decisions on behalf of the organ of state he or she represents, excluding any decision to grant an approval'[255] but will also have direct access to the head of the organ of state he or she represents, the management Committee and the Secretariat and any of its members. Will these powerful representatives be acting within their statutory powers? There is clearly the possibility for compromising just administrative action[256]

[255] Section 12(6)(a) of the October 2013 Bill

[256] 'Administrative action' is defined in the Promotion of Administrative Justice Act 3 of 2000 (PAJA) as 'any decision taken, or any failure to take a decision by an organ of state, when….exercising a public power or performing a public function in terms of any legislation…'. Section 3 of PAJA requires administrative action which materially and adversely affects the rights or legitimate expectations of any person to be procedurally fair and specifies the steps that must be taken to give effect to this right. This right extends to all decisions taken in terms of the ECA and NEMA. See Louis J Kotze & Andries J van der Walt 'Just Administrative Action and the

in this context where the committee is required to develop a project plan and ensure compliance with applicable laws and implementation of the project. It is implicit that approvals of the projects are anticipated.

There does not seem to be a place for the 'no go alternative' or other alternatives to the project as required by section 24 of NEMA. If the authorization is not granted, the relevant authority must provide reasons for such refusal to the steering committee and the applicant.[257] The February 2013 Bill rather ominously included a provision that the Secretariat may then 'enter into negotiations with the relevant authority with a view to obtaining' the authorization or refer the matter to the Management Committee or Commission for any decision or action.[258] It seems possible that undue influence may be applied to the administrative decision in these circumstances. The proposal that the PIC Commission could 'negotiate' to reverse a previous decision by an authority to refuse an authorization subverts the principle that once an organ of state makes a decision it cannot reverse itself.[259] It furthermore subverts the usual process of appeal and the judicial review, and it suggests that the intervention of the courts is unwelcome. The 'negotiation' provision has very wisely been omitted from the October 2013 version of the Bill.

From a legal perspective a number of concerns still persist. The constitutional rights of access to justice[260] and administrative justice[261] are at risk when inflexible rules are laid down as to time periods for public participation processes and the submission of specific documents. The

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Issue of Unreasonable Delay in the Environmental Impact Assessment Process: A South African Perspective' (2003) 10 *SAJELP* at 39-66 for a more detailed explanation of administrative justice in the realm of environmental decision making.

[257] Section 15(4) of the October 2013 Bill

[258] Section 15(6)(a) of the February 2013 Bill.

[259] The principle of *functus officio*.

[260] Constitution of the Republic of South Africa, 1996 at section 34.

[261] Ibid section 33.

level of risk increases further when there is a high degree of scrutiny from higher level government officials on regulatory decisions. As a whole the Bill reveals a lack of commitment to the principles of sustainable development and administrative justice. The Bill contradicts the recent DEA strategy document on Environmental Impact Assessment and Management where one of the main objectives is to move toward a sustainability-led approach in the planning phase and incorporating the approach into all government planning initiatives.[262] The Infrastructure Development Bill can be seen as a retrogressive step from the perspective of protection of the environment and the public participation process. The Bill does not refer to or contemplate the use of SEA, which is advocated for use in the assessment of infrastructure development projects in this study. In fact the prescriptive time periods and process for infrastructure development projects seems to exclude the possibility of SEA entirely. It is hoped that in the implementation of this Bill - the ultimate and laudable aim of which being to speed up delivery of public infrastructure projects - due weight is given to the need for sustainable development.

4.2 Strategic Environmental Assessment (SEA)

The 1998 South African White Paper on an Environmental Management Policy for South Africa defined SEA as '…a process to assess the environmental implications of a proposed strategic decision, policy, plan, programme, piece of legislation or a major plan.'[263]

Glazewski and Brownlie point out that SEA is a more macro level environmental management tool in that it is used to assess the sustainability of 'policies, plans and programmes' rather than discrete projects. They base this on Sadler's definition of SEA as '…a process of prior examination and appraisal of policies, plans and programmes and other higher level or pre-

[262] DEA Strategy op cit note 11.
[263] Kidd & Retief op cit note 123 at 982

project initiatives.'[264] The implementation of SEA is then at a macro planning level stage but this may have 'a real influence on the choice of alternative developments', the choice of locality of particular projects and help ensure that environmental and sustainability considerations are taken into account during the early stages of decision-making processes'[265] by identifying and assessing the key strategic issues and sustainability parameters and indicators. A third definition is included in the DEAT 2004 Guideline Document on SEA – 'a process of integrating the concept of sustainability into strategic decision-making'. [266]

NEMA provides for the development of procedures for the assessment of the impact of policies, plans and programmes. However, there are no detailed regulations in place in SA for environmental assessment of policies, programmes and plans, although the Environmental Management Frameworks provided for in GN R 547 of the 2010 EIA regulations provide useful information[267] to all forms of environmental assessment, particularly SEAs. This lacuna exists even though the regulations state that the information is to be used in the assessment of particular geographical areas as contemplated in section 24(4)(b)(vi) of NEMA.[268]

Glazewski points out that the omission of provision for SEA in South African legislation is 'of concern, as it is regarded as placing undue reliance on project level environmental assessment to deliver sustainable development.'[269] Other calls for SEA in South Africa have come from environmental assessment practitioners. In its April 2013 submission to the DEA, the International Association for Impact Assessment (IAIA), in response to a call by Parliament on

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[264] Glazewski op cit note 50 at 10-7.
[265] Ibid.
[266] DEAT, *Strategic Environmental Assessment*, Integrated Environmental Management Information Series 10 (2004) 4.
[267] Information on or a study of biophysical and socio-cultural systems of geographically defined areas is produced to reveal where specific land uses may best be practiced and to offer performance standards for maintaining appropriate use of land as per the definition of EMF in Regulation 1 of GN R547 of June 2010.
[268] GN R 547, Regulation 2.
[269] Glazewski op cit 50 at 10-3.

'*The Efficacy of SA's EIA Regime: A call for responses to Government's legislative and policy framework to strengthen environmental governance and the sustainability of our development growth path*', stated that,

> 'EIA is designed to assess the impacts of a proposal at project level. While the current EIA Regime, when applied with integrity, can be effective to a certain extent in achieving sustainability, sustainable development cannot be guaranteed unless the current planning legislative framework provides the context within which the EIA should be applied. An effective EIA regime is reliant on the use of strategic planning in the form of EMFs, bioregional plans and SEAs. Clear, strategic and enforceable plans will need to inform project level EIA processes in order to achieve an effective EIA Regime.'[270]

Glazewski mentions that in recent years 'sustainability assessment' has become a popular approach to environmental assessment.[271] This is reflected in the third definition of SEA mentioned above, 'which focuses on the role of SEA in facilitating the move to sustainability… by incorporating the objectives of sustainability at the earliest stages of decision-making.'[272] Sustainability assessment has been called the 'third generation of impact assessment', with EIA and SEA being referred to as the first and second generations respectively.[273] Bond et al summarise sustainability assessment as 'a recent framing of impact assessment that places emphasis on delivering positive net sustainability gains now and into the future. It can be directed to any type of decision-making, can take many forms and is fundamentally pluralistic.'[274]

The first discussion and guideline documents on SEA emerged in South Africa from 1996[275] and moved towards a more 'sustainability centred approach' by 2000 in the DEAT

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[270] IAIA letter dated 30 April 2013 addressed to the Parliamentary Committee p 4.
[271] Glazewski op cit note 50 at 10-4 & 8.
[272] DEAT SEA Guideline op cit note 266 at p 4.
[273] A Bond, A Morrison-Saunders & J Pope 'Sustainability assessment: the state of the art' *Impact Assessment and Project Appraisal* 30 (2012) 53.
[274] Ibid.
[275] CSIR *SEA – A Primer*, Stellenbosch (1996a and b) and in 1997 CSIR's *A Protocol for SEA in South Africa* and a DEAT Guideline Document for SEA in 2000.

Guideline Document on SEA. However, these documents failed to take the SEA concept forward in a practical and concrete manner.[276] The 2000 DEAT Guideline Document did however include the following very useful graphical process description/flow diagram for SEA, which clearly demonstrates the key features of the SEA process, the outline of which is repeated in the 2004

[276] Kidd & Retief op cit note 123 at 981.

SEA Guideline Document.[277]

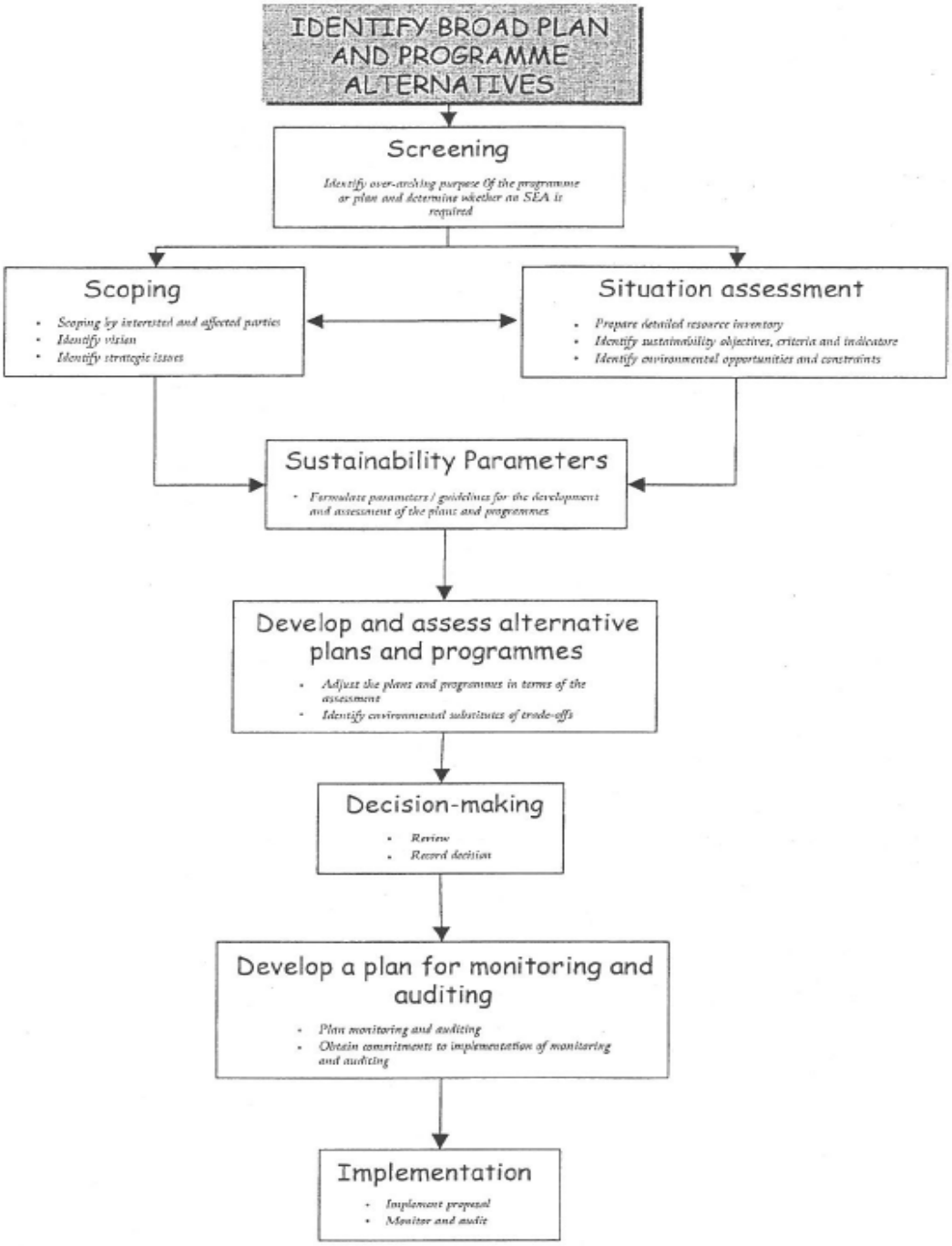


Figure 2.1: SEA Process (DEAT, 2000: p18)

[277] DEAT SEA Guideline op cit note 266 at 8.

Note the provision for a Situation Assessment which would include the identification of social, economic and environmental factors as well as the sustainability objectives, whilst Scoping would identify the strategic issues to be addressed in the SEA. The Sustainability Parameters '(which may be in the form of principles and/ or guidelines) aim to guide the planning process towards achieving the objectives of sustainability already defined.'[278] According to the flow diagram above this may be followed by the development and assessment of alternatives and then decision-making. It is notable that the 2004 DEAT Guideline Document also includes the suggestion of a 'plan for monitoring and auditing'. Such monitoring and auditing results would assist with the recording of the effectiveness or otherwise of SEA.

Most of these key process requirements are reflected in the Flow diagram below of Steps in the SEA process for transport infrastructure plans developed by the European Commission (1999b) and referred to by Wood as Figure 19.1.[279] However, it is observed that the suggested South African process of the identification of 'Sustainability Parameters' is a notable omission from the European SEA process, as a particular process component, although SEA is acknowledged as a vehicle through which sustainable development may be achieved. Nonetheless, the flow diagram presents a useful point of reference, with pertinent questions to raise, for South African transport planners and regulators contemplating the use of SEA.

[278] Ibid at 8 and 9.
[279] Wood op cit note 33 at 332.

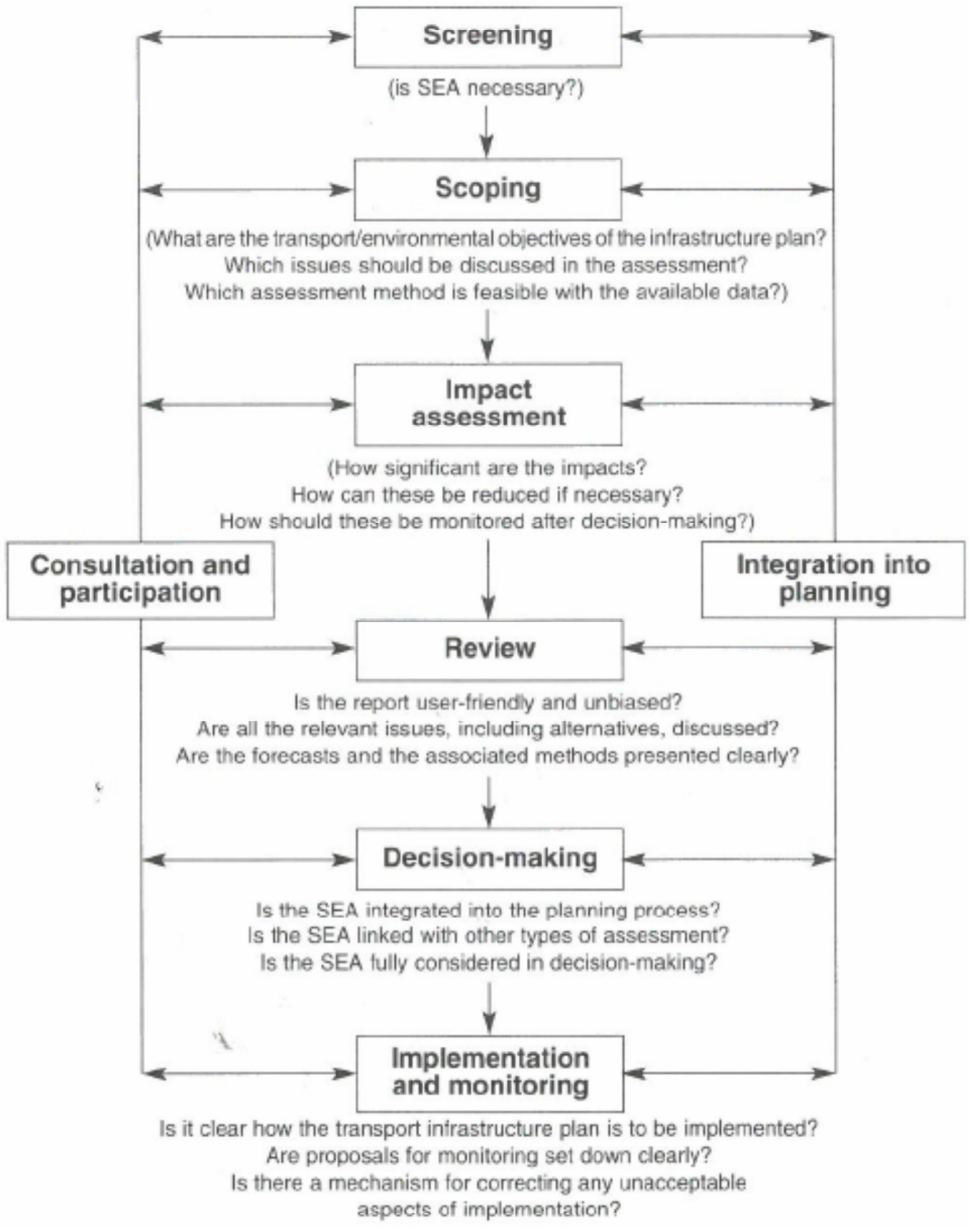


Figure 19.1 Steps in the SEA process for transport infrastructure plans
Source: European Commission, 1999b, opp. p. 12.

Retief and Kidd[280] note that SEA practice is becoming more prevalent in South Africa with a total of 50 SEA's being conducted between 1996 to 2003 and that South African SEA practice could provide solutions to the tailoring of SEA to developing country contexts. However, they state that the 'extent to which SEA has succeeded in addressing the efficiency issues of EIA remains unknown.'

Could SEA play a part in the assessment of 'strategic integrated projects' in South Africa? It is submitted that it most certainly could, provided that a tiered approach is followed and SEA and EIA are 'vertically integrated'.[281] Wood observes that 'in many countries where there is already a project-level EIA system, the most sensible course of action might be to supplement these EIAs with higher-tier SEAs'.[282] SEA could then focus on specific issues such as project alternatives or cumulative impacts, as is recommended below and, SEA can thereby establish 'an appropriate context for project EIA'.[283] Adaptability of the SEA to suit the policy, plan or programmes specific needs and context is of paramount importance.[284]

The writer is of the view that SEAs provide invaluable contextual and sustainability focused information to inform and guide project level EIA. However, EIAs are still required at a project level in terms of South African law, even where a very comprehensive SEA may have been completed. Their real value therefore lies in the extent to which they may make EIAs, particularly for large infrastructure development projects, more focused, efficient and effective. However, SEA requires a clear regulatory and institutional framework, which has not yet been developed in South Africa. Sadler goes further and notes that 'an effective SEA system requires

[280] Kidd & Retief op cit note 123 at 1035.
[281] Sadler op cit 34 at 155 and see Sadler's example of the 'SEA of the European High Speed Train Network' where alternative scenarios of project outline planning were assessed at 169.
[282] Wood op cit note 33 at 335.
[283] Sadler op cit note 34 at 14.
[284] Wood op cit note 33 at 337.

political commitment and organisational support, clear guidance, appropriate methods, monitoring and compliance mechanisms, and a follow-up and feedback capability.'[285] South Africa has some way to go to ensure an effective SEA system but there is steadily increasing interest in the potential application of SEA in the context of infrastructure development projects.

The Department of Environment Affairs' Chief Operating Officer, Ms Lize McCourt, was quoted in Mining Weekly[286] as saying that SEAs would most likely be used to assess linear or geographic Strategic Infrastructure Projects (SIPs) such as the logistics corridor linking the Waterberg coalfields with the Richards Bay terminal. However, it is not clear whether the DEA may still require EIAs for specific projects within this corridor, for example, the upgrade of the Richards Bay port. Ms McCourt also 'indicated her desire to eradicate the perception that EIAs were responsible for delays in the development of new infrastructure.'[287] In her budget speech for 2013 the Minister of Environmental and Water Affairs, Ms Edna Molewa, stated that SEAs would be introduced shortly, specifically in the context of major infrastructure development projects. She said that SEAs are 'typically carried out on one or more large national projects or programmes, as distinct to EIAs, which apply to specific localised projects. The idea is to hasten the process "without undermining sound environmental impact management principles" Minister Molewa said.'[288]

It is inferred from these comments that the DEA may wish to rely more on the third definition of SEA included in the 2004 Guideline Document as their comments imply that they wish to utilise the SEA process to complete a more strategic level sustainability assessment to

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[285] Sadler op cit note 34 at IV.
[286] Terence Creamer 'Streamlined enviro approvals mooted for key infrastructure projects' *Mining Weekly* 28 May 2013.
[287] Ibid.
[288] Patrick Mclaughlin 'Environmental Affairs speed things up with SEAs' at www.parlyreportsa.co.za/energy/environmental-affairs-speed-things-up-with-seas on 25 June 2013.

shortcut the more prolix EIA process. This would not be permissible in law according to the current requirements of the NEMA EIA regulations which simply require the statutory EIA process to be followed if a listed activity is triggered. Therefore, specific legislation would be required to provide for the kinds of SEAs which the DEA seems to be envisaging and, NEMA and the EIA regulations would also need to be amended. This may be done by amending 'EIA law' and/or through planning legislation. These two options are acknowledged in the 2004 DEAT Guideline Document[289] where mention is made that SEA is incorporated in the Municipal Planning and Performance Management Regulations of 2001 under the Municipal Systems Act 32 of 2000 in the context of spatial planning.[290]

An initial SEA could have led to a more focused and efficient EIA for the Gautrain Project. For example, a SEA may well have expedited the initial public participation process for the Gautrain EIA where many I&APs presented questions regarding the need and desirability of the project and suggested other kinds of projects such as the Super Highways Project and even a viaduct above the M1/Ben Schoeman Highway.[291] These kinds of alternatives could have been dealt with more appropriately in an SEA process which could also have investigated routes for Gautrain buses in the Feeder and Distribution System and how these could have linked up with and complemented the cities' Bus Rapid Transit (BRT) Projects. By addressing a broader plan or programme- alternatives, the cumulative impacts of the urban transport plan and the environmental and social quality or limits of acceptable change could have been identified and better understood and public participation strengthened.[292]

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[289] DEAT SEA Guideline op cit note 266 at 6.
[290] GN R 796 in GG 22605 of 24 August 2001. Section 2(4)(f) of these regulations requires a 'strategic assessment of the environmental impact of the spatial development framework' that is to be included as part of the municipality's integrated development plan.
[291] EIA for the Gautrain Project *Issues Report*, 31 July 2002 at Table 1 on comments raised by I&APs on the Route Alignment and Station Locations suggesting entirely different routes and projects.
[292] Sadler op cit 34.

Conducting an SEA allows for presenting to the public a proposed infrastructure development as part of a broader development plan, rather than presenting them with, as part of EIA process, the relatively narrow and localised impacts of a specific portion of a project. It is therefore considered that a SEA is more likely to receive public support, and therefore render it easier to obtain the public's support for a specific project falling under the umbrella of the strategic development plan.

Regulations on procedures to be followed in promoting public participation in transport planning processes were issued by the Gauteng Department of Transport and Roads in September 2013 under the National Land Transport Act 5 of 2009[293] and have highlighted the need for integrated transport plans. Public participation is now required on the integrated transport plans which the Province and its municipalities are required to develop. Notice is required of the intention to start the transport planning process and comments from the public must be requested.[294] Comments must be sought again when a first draft integrated plan and/or a Provincial Land Transport Framework (PLTF) has been completed. An SEA could be conducted on an integrated transport plan or on specified components within the plan. This more strategic approach to planning is to be welcomed and augurs well for SEA in South Africa as strategic assessment is particularly apposite to strategic planning.

A note of caution is nevertheless appropriate in light of the Infrastructure Development Bill, the introduction of which appears to run counter to the abovementioned remarks of DEA officials and the introduction of the above public participation regulations.

[293] Gauteng Provincial Gazette 266 of 12 September 2013.
[294] Regulation 3 of PN 266.

5. Findings and recommendations

5.1 Summary of Findings

Impact assessments done before the tender stage of large infrastructure development projects such as the Gautrain Proj*e*ct are likely to become redundant. This is because the impacts and mitigation measures can only be properly ascertained once the project design has been finalised by the successful bidder. Only once project design has been finalised should detailed impact assessment be done, by the party that will ultimately carry the risk and responsibility for the construction of the infrastructure. The Scoping process should identify key issues for assessment and influence preliminary design plans. SEA would assist to further streamline and focus impact assessment processes.

High expectations for the EMP process were evidenced by the enthusiastic support for the GDACE approach offered by the High Court in the MLPORA judgment.[295] However, EMPs cannot by their nature assess and predict impacts – this is the purview of the EIA process. Thus the Gautrain EMP process, devised by GDACE to supplement the EIA process through the elaborate EMP requirements incorporated in the Gautrain Project RoD, was doomed to fail to attain the high expectations which were set for it. Nevertheless the EMP process should remain an important tool for ensuring that the management actions arising from EIA processes are clearly defined and implemented through the phases of the project life-cycle.

The Gautrain RoD's EMP requirements were a direct precursor to the current statutory EMP requirements and were therefore to some extent indicative of 'things to come'. They required a public participation process and allowed for the development process of various EMPs covering the design, construction and operation and maintenance phases of the Gautrain Project.

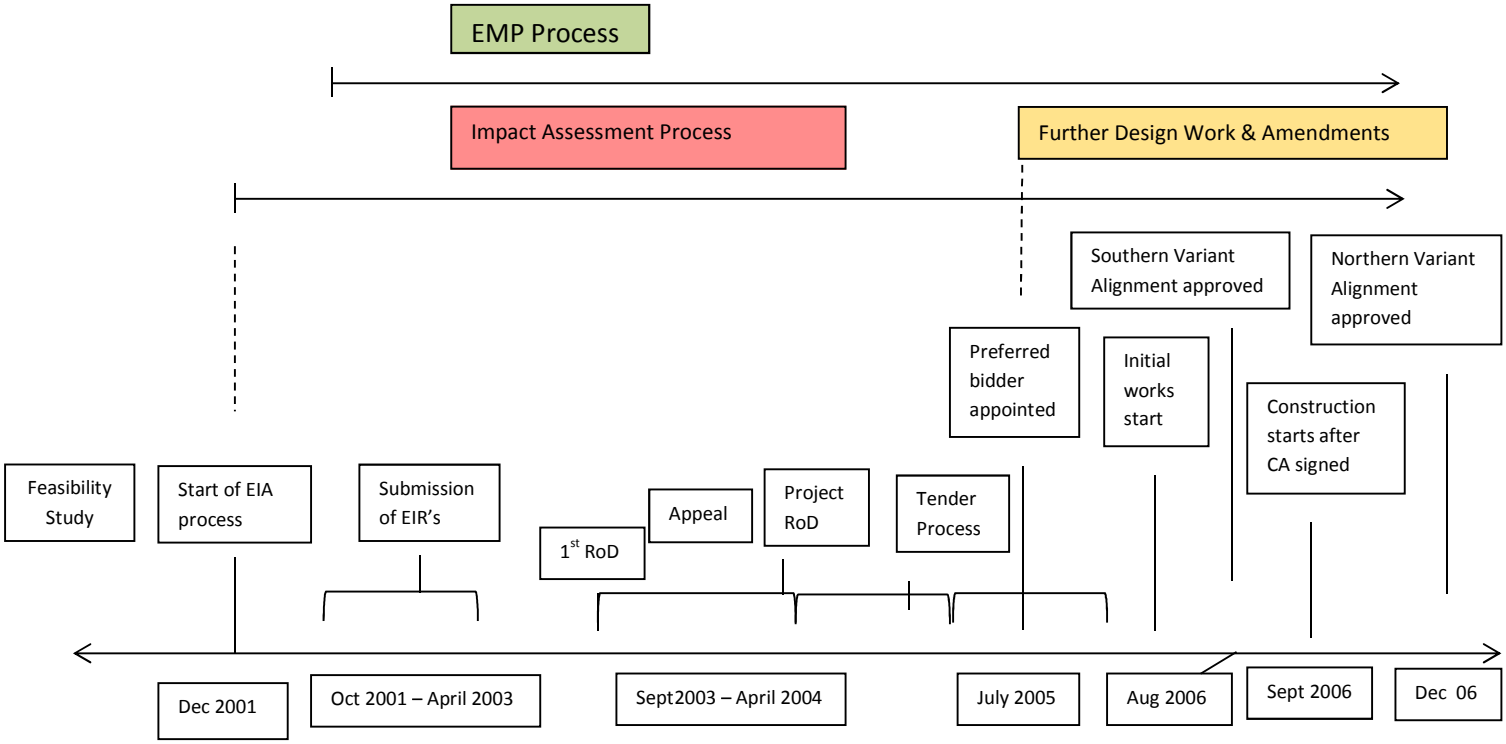
[295] *MLPORA* case op cit note 2.

The RoD did not however specify the process for the amendment and updates of the EMPs as the implementation of the project progressed. GDACE's authorisation of the EMP was required prior to the start of construction and operations respectively, hence the term ‘conditional RoD’. The ultimate question is whether the EMP process managed to successfully supplement the Gautrain EIA which was conducted with limited information. It is submitted that the EMP did not do so with reference to the substantive content of the Construction related EMP. This is primarily because detailed construction method statements were not in fact appended to the EMP and made available to I&APs, as is noted in section 3.5 above. Therefore, the required detail was also omitted from the EMP process. Furthermore, the EMPs were not regularly updated and therefore do not seem to have been dynamic documents responsive to changing circumstances and project developments.

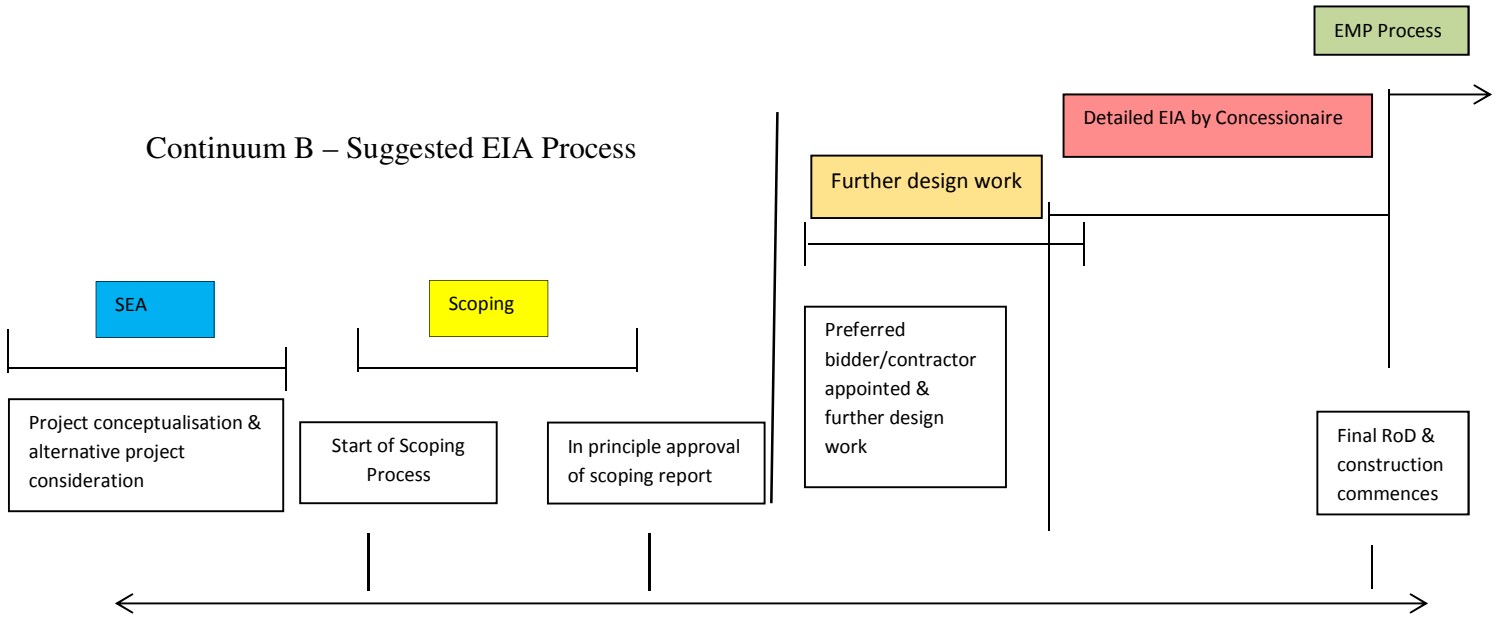
5.2 Recommendations

The following diagrams illustrate the EIA process followed in the Gautrain Project compared to a suggested EIA process, as outlined above, directly below it.

Continuum A – Gautrain EIA Process



Continuum B – Suggested EIA Process



The suggested EIA process in Continuum B would require the amendment of the EIA regulations to allow for an 'in principle' decision to be made at the end of the scoping process, with conditions.

It is noted in section 2.3 above that although the 1997 EIA regulations allowed for a positive decision, thereby allowing a development to proceed, after the scoping phase; this is not permitted in terms of the 2006 and 2010 EIA regulations. In the Gautrain EIA process a complete scoping process was not conducted and therefore no opportunity was available for a decision after scoping, which would have provided guidance and focus to the EIA process.[296] In the writer's view the legislature's omission of a post-scoping approval from the 1997 EIA regulations in the 2006 and 2010 EIA regulations, was a retrogressive step.

The Scoping process in EIA, especially for large scale development projects should be made more flexible to make provision for an 'in principle' decision on the project after a significantly more thorough assessment process has been conducted as part of the Scoping phase. This 'in principle' decision, if in favour of the project proceeding, would be taken into the Tender process. It might be to the effect that a project of this nature in the particular study area would appear to be a feasible project, subject to full impact assessment. A positive decision would not be final,[297] but would be conditional upon the completion of detailed impact assessment which would need to show that all anticipated impacts can be managed and mitigated. In his seminal book on EIA[298] Wood reminds us that 'the scoping process should be creative and flexible' and should be designed to meet the needs of the particular project.[299] Wood

[296] Section 3.3 above.
[297] A negative decision would be final.
[298] Wood op cit note 33 which includes a comparative review of the South African EIA system.
[299] Ibid at 160 quoting from Marriot (1997) and Mulvihill & Jacobs (1998).

quotes from Mulvihill and Jacobs[300] who state that 'as it sets the stage for subsequent steps in the EIA process, scoping needs to be a sufficiently broad umbrella that accommodates diverse approaches to identifying, classifying and assessing impacts.'[301] It is submitted that if sufficient assessment is conducted at this scoping stage, it would furthermore assist decision makers to make this 'in principle' decision after scoping, to the effect that the project should (or should not) be carried forward to full impact assessment. Glazewski and Brownlie are also of the opinion, 'that environmental assessment would benefit from proper scoping to inform the need for, and focus of environmental assessment.'[302]

When considering legislative amendments to allow for a more expansive and flexible process for scoping, the Competent Authority should also consider making provision for a change in the identity of the applicant after scoping, particularly for large scale development projects. The successful bidder could then be responsible for applying for authorisation and for conducting the detailed impact assessment based on its own final design. This approach would obviate the need for numerous, lengthy and costly amendments to the authorisations as the project design evolves and is finalized, as was the case with the Gautrain Project. The authorization relating to the detailed design and construction phase of the project should be issued in the name of the party which is actually responsible for design and construction. In terms of this approach the government department or entity responsible for initiating the project would obtain the 'in principle' approval for the project based on an expanded and more comprehensive scoping process. Alternatively, if the project application is rejected by the Competent Authority then no further time and costs need be wasted on a tender process for a project that ultimately would not receive an environmental authorisation.

[300] 1998 at 351.
[301] Wood op cit note 33 at 161.
[302] Glazewski op cit note 50 at 10-34

In the context of the Gautrain Project this approach would have meant that rather than presenting the two final bidding consortia with the Project RoD of 25 April 2004 - the GDPTRW would have presented them with an 'in principle' approval by GDACE of a recommended alignment (flowing from an expanded and more comprehensive scoping phase which would have included much the same level of specialist studies that were included in the actual EIA process) for further detailed investigation by the successful bidder in the EIA phase.

If there were provision for the transfer of 'in principle decision' after scoping to an appointed Concessionaire, to proceed with the EIA, once it has further progressed its designs, there would then be no need for on-going amendment applications as the design progresses. This would also obviate the need for undue reliance on the EMP process to attempt to supplement the impact assessment process due to insufficient information being available at the time that the impact assessment was completed.

Due to the extremely high cost of design work, more detailed design is usually postponed until after the appointment of the Preferred Bidder or Concessionaire. This is reflected by both Continua A and B above. Furthermore, project proponents and developers need to know whether the environmental authorities believe that the project is feasible from an environmental perspective, even if subject to conditions, before accepting the appointment and commencing detailed design. The SEA process would contribute to this as regulators and planners would have input to the process at the planning stage. The kinds of tools advocated for use in the DEA's strategy document on Environmental Impact Assessment and Management[303] include SEA, Environmental Management Frameworks (EMFs),[304] Integrated Development Plans and Spatial

[303] DEA Strategy op cit note 11 at 20.

[304] EMFs are defined in EMF regulation GN R 547 under NEMA as 'means a study of the biophysical and socio-cultural systems of a geographically defined area to reveal where specific land uses may best be practiced and to offer performance standards for maintaining appropriate use of such land'.

Development Frameworks. The strategy advocates that these planning tools be infused with sustainability objectives, criteria or targets and indicators prior to implementation. The strategy suggests these planning tools in addition to EIA, which it states should only be used when it is the most appropriate tool. The strategy document states that the aim is, 'to shift from the current reactive approach in IEM with the dependency on EIA as the main compulsory tool towards a more strategic proactive approach, a hierarchy/ cascade for the environmental instruments and tools should clearly be applied….to provide the contextual framework for strategic environmental planning.'[305] These higher order environmental management tools would assist to supplement other environmental management tools such as EIA. A proposed development would need to define a 'desired sustainability outcome' prior to the identification of impacts.[306] However, it is likely that most infrastructure development projects would still require EIA due to the scale of environmental impacts associated with these projects.

Wood notes further that the EIA report should be prepared 'as late as possible i.e. it should represent the nature of the proposal immediately prior to the submission of the EIA report rather than at the initial design stage.'[307] It is submitted that the process suggested in Continuum B above may address this need effectively, relatively quickly and cost efficiently.

It is submitted that the implementation of these recommendations will make the EIA process more flexible, effective and appropriate in relation to large infrastructure development projects. This will hopefully address Retief and Kidd's concerns that - EIA has become 'increasingly prescriptive and rigidly straight jacketed in relation to the defined legal mandate – a

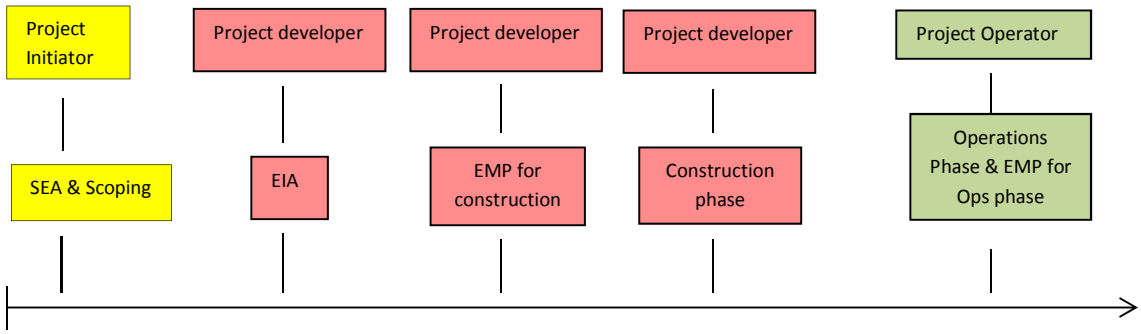
[305] DEA Strategy op cit note 11 at 23.
[306] Ibid at 25.
[307] Wood op cit 33 at 177.

move away from the need for flexibility and issues driven approaches during the early years of EA application.'[308]

Furthermore, project proponents would need to plan both the EIA processes and the implementation phases of the project more carefully. Substantive submissions regarding the proposed process to be followed and the transfer of the responsibility as applicant, as well as environmental authorisations, would need to be prepared and submitted to the competent authority. These plans and provision for the associated obligations and potential liabilities would need to be incorporated into the Concession Agreement and/or other sub-contracts for specific parties.

The potential responsible parties and their distinctive responsibilities are reflected on the diagram below.

Continuum representing potential responsible parties over the life of the project



Section 3.2 details the practical problems experienced on the Gautrain Project as to the identities of the holder of the authorisations and the responsible parties. It is clear from these sections that parties to such projects need to acknowledge and plan for a potential change in the responsible party or holder of the authorisation at one or more phases in the design, build and/or operation of the project. It is explained in section 2.2 that NEMA has recently been amended to provide that

[308] Kidd & Retief op cit note 123 at 973

'every environmental authorisation must as a minimum ensure that ...provision is made for the transfer of rights and obligations.'[309] This opportunity should be taken advantage of in these projects.

It should also be recognised by the Competent Authority issuing the authorisation that a hybrid situation, in so far as the responsible parties are concerned, may need to be provided for in the authorisation. For example, it may be appropriate to make provision for the Turnkey Contractor and/or Civil Contractor to be fully responsible for compliance with the conditions of the authorisation during the construction period, when it has full control over site related activities, even though the actual holder of the authorisation may not change. Similarly, an Operating company would be an appropriate party to assume full responsibility for compliance *vis-à-vis* third parties and the authorities in an operational phase of a project such as the Gautrain Project.

The writer foresees the possibility of a future requirement for applications for environmental authorisations to include a detailed motivation by attorneys for the applicant as to responsible parties in different phases of these large scale infrastructure development projects. These kinds of submissions would include draft wording which correlates with the contractual arrangements between the parties, for consideration by the competent authority. If the submissions are made before the contracts are entered into then the contracts would need to be drafted in such a way that they emulate the arrangements for specific compliance responsibilities, as provided for in the environmental authorisation. This kind of arrangement would certainly lead to the issue of authorisations which are more congruent with and reflective of project and contractual realities and changing circumstances. They would also make enforcement action more effective in that there would be clarity as to exactly which party is responsible for

[309] National Environmental Management Laws Second Amendment Act 30 of 2013.

compliance during which particular phase of the project. In addition, the enforcement action would be directly underpinned by contractual undertakings and penalties.

It is necessary for the Department of Environmental Affairs to recognise that determination of the identity of the applicant and responsible parties for compliance with the conditions of authorisations is a complex and multifaceted issue which requires a sophisticated and flexible regulatory approach. On the other hand, project developers need to give more thought to these issues and, rather than devolving the entire EIA process to the EAP, take an active role in discussing and planning accountability for compliance with the authorisations in the various stages of the implementation of the project. The submissions to be made to the competent authority on these issues would, however, form part of the EIA application and therefore should be open to public comment and scrutiny through the public participation process.

The use of the SEA process is a further intervention which could assist to streamline and focus the EIAs for these projects. Although the SEA process was not utilised in the planning process for the development of current transport infrastructure in Johannesburg, Tshwane and Ekurhuleni, it may still be employed for proposed further developments of these systems in future. For example, SEA would be appropriate and useful for the extension of the Gautrain and BRT projects in these cities and, the integration of these systems along with integration with Metrorail stations and services. The 2004 DEA Guideline Document advocates 'a more proactive use of SEA in the integration of sustainability objectives into the formulation of strategies and frameworks for future decision making' with a focus on 'expanding the information base for future decision-making over a period of time, to include issues related to sustainability'[310] which

[310] DEAT SEA Guideline op cit note 266 at 11.

would be apposite. Internationally there is an increasing recognition that some form of SEA is necessary.[311]

An initial move in the right direction has certainly been made in Gauteng with the publication of the public participation procedures to be followed in the transport planning process in terms of the National Land Transport Act 5 of 2009,[312] as this would be congruent with a SEA process. However, the Infrastructure Development Bill's proposed acceleration of the EIA process, coupled with the failure to specifically include other environmental and strategic planning tools such as SEA, does not bode well for the inclusion of public participation in the process, nor for robust and defendable assessment processes, which achieve the objectives of integrated environmental management and thereby promote sustainable development.[313]

It is hoped that this study contributes towards a broader consideration of alternative ways to conduct impact assessment for large infrastructure development projects such as the Gautrain Project, that will result in more time, cost and risk allocation efficient processes for project proponents; more meaningful participation for I&APs and EIA processes and outcomes that support the NEMA principles and objectives of integrated environmental management.

Word Count of Dissertation: 34546

[311] Wood op cit note 33 at 357.
[312] Gauteng Provincial Gazette 266 of 12 September 2013.
[313] Wood op cit note 33 at 369 notes that 'there remains widespread concern that, despite the establishment and refinement of EIA systems, the achievement of sustainable development goals remains elusive. While the linkage between EIA and sustainable development is widely accepted, principles, criteria, thresholds and limits concerning aspects of sustainable development have not been incorporated into EIA practice sufficiently…'.

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