

**CONTRACTOR AND SUB-CONTRACTOR COMPLIANCE WITH
EMPOWERMENT REQUIREMENTS OF THE NATIONAL
ROADS AGENCY**

***Final Report
July 2004***

REPORT COMPILED BY THE HUMAN SCIENCES RESEARCH COUNCIL

Human Sciences Research Council (www.hsrc.ac.za)

The Human Sciences Research Council (HSRC) of South Africa is a statutory body established in 1968 and is now one of the leading research institutions in the region. It supports development nationally, in the Southern African Development Community (SADC) and in Africa. The HSRC primarily conducts large-scale, policy-relevant, social-scientific projects for public-sector users, non-governmental organisations and international agencies. With more than 130 top researchers and 100 support staff, the HSRC is well equipped to respond flexibly and comprehensively to these current and emerging needs. Its ten multi-disciplinary research programs, focused on user needs, are spread across five centres in different parts of South Africa.

Research Team

Dr. Stephen Rule
Ms. Bongiwe Mncwango
Mr. Zakes Langa
Ms. Jarè Struwig
Dr. Marlene Roefs

Project Administrator

Ms. Annemarie Booyens

Fieldwork

Mr. Solly Siema
Mr. Sydney Fryer
Mr. Gift Molefe
Ms. Hermien Bolton
Ms. Barbara Mohlaoli
Frontline

TABLE OF CONTENTS

ABBREVIATIONS.....	vi
EXECUTIVE SUMMARY.....	viii
1. INTRODUCTION	1
2. RESEARCH METHODOLOGY.....	3
3. MAIN CONTRACTORS.....	5
4. SUBCONTRACTORS	12
5. COMMUNITY LIAISON OFFICERS	30
6. CONSULTING ENGINEERS.....	34
7. ROUTE MANAGERS AND RESIDENT ENGINEERS.....	39
8. CONCLUSIONS	44

LIST OF TABLES

Table 1:	Distribution of NRA projects by region and size	2
Table 2:	Sample Size: MCs and PLCs	3
Table 3:	Estimated Sample Size: SCs	4
Table 4:	Realised sample totals	4
Table 5:	Distribution of head offices and regional offices of MCs.....	5
Table 6:	Revenue and value of scheduled NRA contracts	5
Table 7:	Size of workforce.....	6
Table 8:	WM : PDI ratio at different occupational levels	6
Table 9:	Main criteria used by MCs when selecting SCs	8
Table 10:	BE status of subcontractors to the main contractors	8
Table 11:	Geographical distribution of SCs	12
Table 12:	Subcontractor work activities and specialisations	14
Table 13:	BE status of subcontractors by project type	15
Table 14:	Range of company annual revenue for Subcontractors, 2000-2002.....	15
Table 15:	(a) Subcontractor company revenue by company status	15
Table 15:	(b) Value of current NRA project by company status.....	15
Table 16:	Number of subcontractor companies by workforce size	16
Table 17:	Size of workforce by subcontractor company status.....	16
Table 18:	Main criteria by SCs when recruiting workers	17
Table 19:	CLO relationships with other project role players	32
Table 20:	Reasons for CLO frustrations with NRA projects	33
Table 21:	Suggested improvements of CLO role	33
Table 22:	Distribution of head and regional offices of consulting engineers	34
Table 23:	Revenue and value of scheduled NRA contracts for CEs	34
Table 24:	Size of workforce.....	34
Table 25:	WM : PDI ratio at different occupational levels in CE companies.....	35
Table 26:	Criteria used by consulting engineers when selecting SCs	36

LIST OF FIGURES

Figure 1:	Contractual Arrangements on NRA projects.....	v
Figure 2:	Subcontractor company types	13
Figure 3:	Year in which subcontractors started trading.....	14
Figure 4:	Subcontractor perceptions of reason for award of contracts.....	18
Figure 5:	Subcontractors' perceptions of their relationships with MCs.....	21
Figure 6:	Subcontractors' perceptions of their relationship with NRA.....	23
Figure 7:	Frequency of SC meetings with Route Manager/Residential Engineer.....	24
Figure 8:	Types of training received by Subcontractors and their employees	26
Figure 9:	Route manager/Resident Engineer perception of NRA/MC relations	39
Figure 10:	Perceived relationship between RM/RE and NRA.....	40

ABBREVIATIONS

AAI	Alterations and Additions
ABE	Affirmable Business Enterprise, i.e. a business which adheres to statutory labour practices, is a legal entity registered with the SA Revenue Services and a continuing and independent enterprise for profit providing a commercially useful function
BE	Black empowered, i.e. black ownership between 25% and 50%
BEE	Black Economic Empowerment
BO	Black owned, i.e. black ownership greater than 50%
CE	Consulting Engineer
CLO	Community Liaison Officer
FTE	Full-time equivalent (employees)
MC	Main Contractor
NRA	South African National Roads Agency
PDI/HDI	Previously/Historically Disadvantaged Individual, i.e. everyone but white males
PLC	Project Liaison Committee
RM/RE	Route manager/ Resident engineer
RRM	Routine Road Maintenance
SC	Subcontractor
SMME	Small, micro or medium enterprise
WM	White male

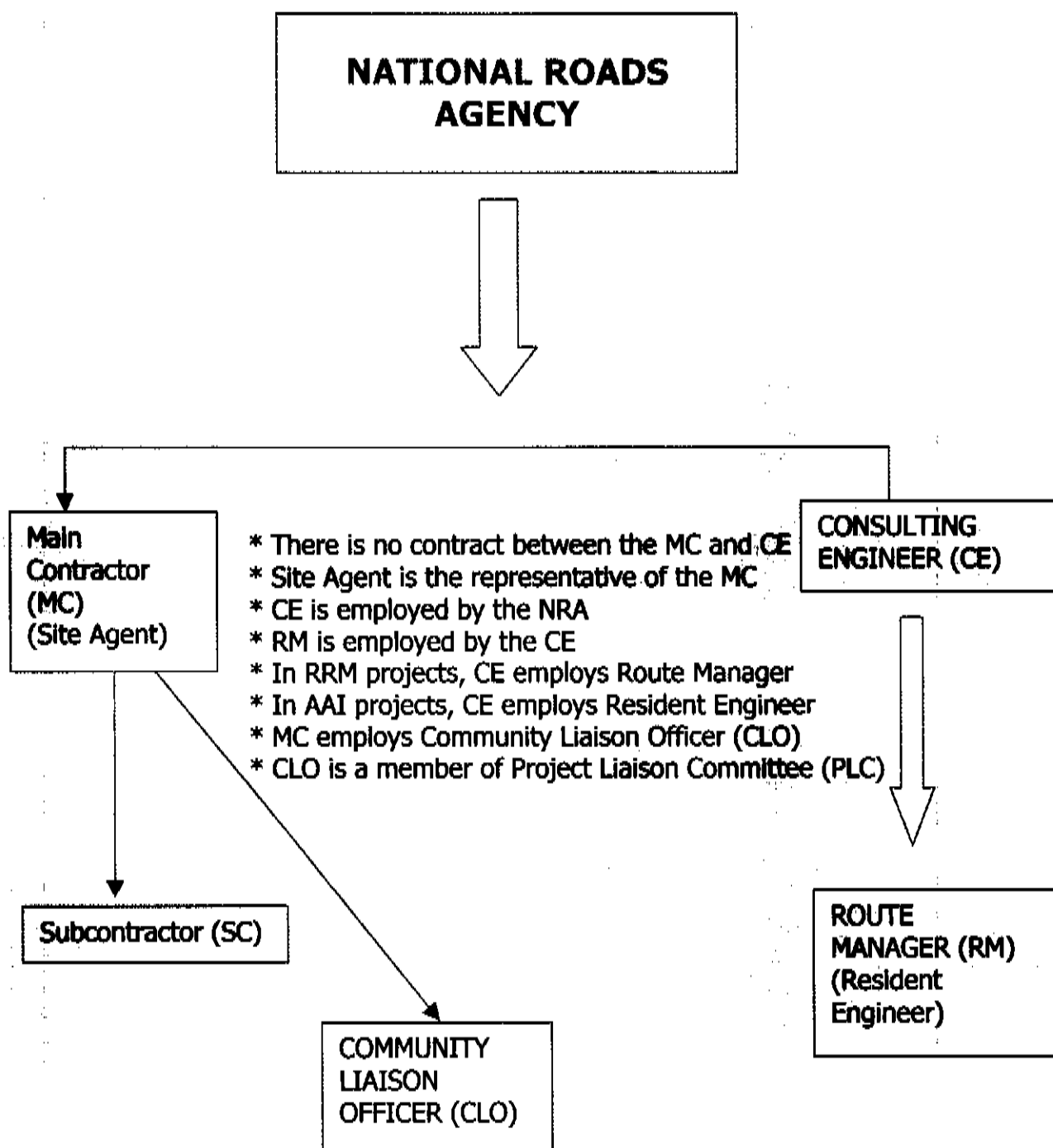


Figure 1: Contractual Arrangements on NRA projects

EXECUTIVE SUMMARY

Introduction

- The Human Sciences Research Council was commissioned by the National Roads Agency to undertake a study of the extent to which its main contractors and subcontractors are in compliance with the NRA's employment and equity requirements.
- The NRA thus needed an independent assessment of its performance with regard to its use of small, medium and micro enterprises (SMMEs) and affirmable business enterprises (ABEs) in both Routine Road Maintenance and Additions and Improvements projects.
- The NRA is acutely aware of the shortage of black engineers and other road construction skills and expertise in the country. It therefore wanted to determine the extent of compliance with equity and empowerment criteria, and by viability and applicability in the current context.

Methodology

- A survey of a representative and geographically dispersed sample of the Main contractors and Subcontractors was conducted.
- A sample size of 31 projects was selected with the project size and geographical region as two selection criteria.
- Main contractors (MC), subcontractors (SC), Consulting Engineers (CE), Route Managers (RM) or Resident Engineers (RE) and Community Liaison Officers (CLO) or Community Representatives (CR) from four regions, that is Northern, KwaZulu-Natal and Mpumalanga, Southern and Western Cape were interviewed.
- Main contractors were perused to assess official perceptions of compliance with empowerment requirements. The survey included the issue of skill shortages and solicited suggestions about the alleviation thereof.
- PLC representatives were asked for suggestions to improve the structure and business arrangements and about project relationships and dynamics.
- Subcontracted companies were asked questions about ownership and management of the respective companies.

Main Contractors

- From a sample of 31 projects, 21 interviews were conducted.
- One third either refused to respond or did not return the completed questionnaires.
- Eleven MCs were private companies, five were close corporations, three were JSE-listed and two were 'other' types.
- A substantive number of the MCs were relatively new operations with more than one quarter (5) having started operating in the last four years.
- More than half (11) of the MC studied had head offices in Gauteng.

- Company revenue amongst the MCs ranged from R600 00 to R1 billion during the last three years.
- Currently they are receiving between R12,7-million and R2,1-billion for scheduled contract work for the NRA.
- Most in semi skilled and unskilled worker categories were black males; only 29% of MCs had white males at these levels.
- Almost half (46%) of the companies surveyed were white owned.
- There was an equal split between those that had a published employment equity policies and those that did not have.
- Almost half (10) have been involved in NRA projects in their previous jobs.
- When asked why they subcontracted part of their project work, about 62% said it was to comply with the 80% specification of the NRA.
- About 62% said they conveyed their equity expectations openly in meetings with SCs or in documentation for SCs at the tender stage.
- About 48% said there was 'strong trust' between MCs and SCs and 43% said there was 'trust'.
- About 43% indicated that support from NRA has been 'excellent' while a further 48% said support from NRA has been 'satisfactory'.
- Most MCs (71%) felt that the NRA affirmative action procurement policies were achievable.
- Almost one quarter (24%) reported that their projects had Community Liaison Officers who were selected by local authorities.
- There was a general census that no restructuring in the role of CLO was necessary.

Subcontractors

- The realised sample numbered 104, constituting 43% of the original list of 240.
- Just over two-fifths (42%) indicated that they were involved in RRM and 21%, in AAI projects. A sizeable 37% were not sure of the type of project on which they had worked.
- A large number of SCs were based in metropolitan areas, i.e. 23 in Gauteng, 20 in KwaZulu-Natal and 20 in the Western Cape.
- About 80% were close corporation companies and 88% said their companies were registered.
- A large number of SCs (70%) started operating in 1998 or later.
- Of 104 companies surveyed, 65 described themselves as 'black owned'.
- Annual revenue received by SCs between 2000 and 2002 ranged from R950 to R71-million, with the PDI owned or empowered companies being dominant amongst the higher as well as the lower revenue earning companies.

- There was correlation between the age of the company and number of full time employees.
- Over four-fifths (83%) of SCs preferred employing people with relevant skills because short-term projects allowed no time for training of the employees.
- Over half (53%) secured their current projects through following standard tender procedures.
- The majority of SCs (60%) said they were awarded contracts because of their previous track record in the field and a sizeable 45% said it was because of their quotations.
- When asked about contracting parties in the project, surprisingly of the 35% that answered, many SCs claimed to have a contract directly with the NRA, rather than with their MC.
- On the levels of satisfaction with the NRA equity requirement, only 13% said they were dissatisfied.
- On suggestions to improve NRA equity requirements, many proposed that bigger companies should not be allowed to tender for small projects, whilst some said emerging SCs should be given more recognition.
- Out of 81 respondents, 38% had never met with the PLC.
- A rather large group (30%) claimed to be unhappy with their relationship with the PLC. Over one-sixth (17%) said the PLC offered them no support.
- About one-fifth (21%) of the SCs said they had never met with the CLO.
- Half (50%) said they were 'happy' with their relationship with the MCs whilst 24% said they were 'not happy'.
- Underlying reasons for sour relations between SCs and MCs included the problem of non-payment by MCs, late payments by MC, lack of transparency and SCs being forced to under-price projects.
- SCs felt that local community members should be employed in projects.
- About 52% said they were 'happy' with their relationship with the NRA. Almost half (47%) indicated that support received from the NRA was 'good' or 'satisfactory'.
- With regard to their relationship with the RM or RE, only 8% said they had never met with the RM/RE, as opposed to 31% that said the RM/RE was on site every day.
- Many mentioned project management as a crucial skill for the successful completion of the projects. Other skills mentioned included generic skills such as time management, commitment, trustworthiness, and problem solving.
- The short-term nature of projects posed serious challenges to both SCs and MCs with regard to training and career planning.
- Three-quarters (75%) said they obtained skills such as pipe laying, sidewalk construction and patching and other RRM skills often while on the job; 55% said these skills were obtained from previous experience.

- The vast majority of SCs did not have any formal procedures for performance evaluation of their employees.
- About 35% of SCs said they were experiencing cash flow problems. The underlying cause often cited was non-payment or late payment by the MCs.
- When asked if there were any other difficulties experienced in the projects, there was a general outcry about 'low profits' and 'very low budgets'.

Community Liaison Officers

- A total of nine Community Representatives or Community Liaison Officers provided responses to the questionnaire.
- When asked to describe their roles, some said their specific task is to recruit local communities for contract work.
- On the question of how they were selected, 9 said they were appointed by the MC.
- All Community Representatives had matric or post matric certificates with the exception of one who had a university degree.
- Many cited communication and interpersonal skills as the most important skills or expertise needed to be effective in their roles.
- Only half of the Community Representatives were confident that the human resources of the SC were adequate for the successful completion of the projects. They argued that lack of success resulted from a lack of suitable equipment and appropriate experience.
- Six of the nine CLO respondents suggested that local small companies should be offered training and be offered projects as subcontractors.
- When asked about the most discussed issue during the meetings, most CLOs cited labour, and SMME grievances.

Consulting Engineers

- Consulting Engineers (CEs) from nine of the 31 projects surveyed completed the survey questionnaire, a further six having taken part during the pilot of the study.
- Amongst those who completed the questionnaire, 7 described themselves as BE companies and 3 as PDI owned.
- Annual company revenue amongst the CE's companies ranged from R2,4-million to R133,5-million in the last three years.
- Looking at empowerment at different levels, many of the CE's companies had more whites than PDIs in senior management positions.
- Amongst the CE's companies that responded to the survey, the mean percentage of the payroll invested in training was 2,06%.
- Only one of the responding companies had a published procurement policy.

- With regard to the selection of subcontractors, six of the nine said they had a database of potential SCs and the main criteria for selection were 'skills' followed by 'equity' and 'rates'.
- Two of the CE's companies said the reason they subcontracted parts of the project was to comply with NRA tender requirements.
- On two occasions where contracts were terminated, the reason for this was a budget cut by the NRA.
- When asked about their relationship with the NRA staff, six of the nine respondents said it was 'very satisfactory' while a further 2 said it was 'satisfactory'. With respect to support from the NRA, all nine described it as 'excellent'.
- On the question of how equity requirements were conveyed to the SCs, it was indicated that they were communicated openly in the meetings with SCs and in documentation provided to SCs.
- To ensure adherence to the equity requirements, the CE often provided in-house training and also conveyed these expectations in monthly meetings.
- Seven of the nine respondents said the NRA affirmative action procurement targets were achievable.

Route Managers and Resident Engineers

- A total of fourteen Route Managers/Resident Engineers provided responses to the survey questionnaire.
- Two RMs/REs stated that they had never written any reports to the NRA whilst others had written up to 50 reports.
- With the exception of one, all REs/RMs were full-time employed on one specific NRA project.
- RMs/REs met with SCs either on a daily basis or every few days.
- All RMs/REs interviewed stated that the relationship between the NRA and MCs was 'satisfactory'.
- All RMs/REs also described their relationship with NRA as 'satisfactory'.
- Relations between RMs/REs and CLOs were described as 'very 'satisfactory', 'satisfactory' or 'so-so' in some cases.
- In terms of the main challenges facing the RMs/REs, the most frequent was the need for strict management control, strict financial control and compliance with ABE requirements. It was suggested that regular meetings between different parties in the project could curb such problems.
- When asked whether they would have approached the project differently, five indicated that they would have, especially with regard to the purchasing of materials and issues in respect of SMMEs and BEE.
- The most common method employed by the RMs/REs to ensure compliance with the NRA equity requirements was to monitor the reports received from the MC closely against the specifications set out in the tender documents.

- Although committed to BEE, RMs/REs argued that BEE is indeed a challenge and claimed that SCs needed training especially with regard to budgeting.

Conclusions

- In spite of the acute shortage of qualified black civil engineers, almost half of the MCs had achieved high levels of PDI representation in their top and senior management structures.
- MCs indicated that they spent up to 10 percent of their payrolls on skills development programmes.
- A high proportion of SCs were PDI companies, that is 95% of those involved in Alterations and Additions projects, and 91% of those in Routine Road Maintenance.
- Many SCs used the survey as a forum for the expression of gripes.
- The main complaints raised stemmed from their dissatisfaction about non-payment or late payment by MCs.
- There was also a general observation by SCs that some MC use 'fronting' methods to secure tenders. In order to reduce this phenomenon, it is recommended that BEE targets be slightly reduced.
- One main observation by CLOs was that SC's were often inadequately qualified or equipped to complete projects successfully and proposed that they be offered comprehensive training.
- CEs were generally satisfied; they however suggested that Joint Ventures be discouraged so that the larger companies were motivated to channel more resources into achieving BEE targets.
- RMs/REs were concerned about the post project sustainability of some SCs.

1. INTRODUCTION

It has become widely accepted that a well-developed road infrastructure and an efficient transport system are critical components for successful economic development. Investment in these sectors results has inestimable positive multiplier effects in other sectors of an economy. In the South African context, a major investment in the future of roads has taken the form of the South African National Roads agency in 1998. The National Roads Agency (NRA) took over from the South African Roads Board as enacted by the National Roads Act 1988.

ACT

To make provision for the National Roads Agency for the Republic to manage and control the national roads system and take charge, amongst others, of the development, maintenance and rehabilitation of national roads within government policy; for that purpose to provide for the establishment of the South African National Roads Agency Limited...

The South African government's representative, the Minister of Transport was declared the sole owner of the NRA. The 'Agency' is an independent, commercially driven company registered in terms of the Companies Act. Its core business to 'develop, maintain and manage' South African national roads¹. According to the strategic vision of the NRA for 2010, the "challenge to Government is to maintain and enhance a sophisticated state-of-the-art roads network while overcoming developmental inequalities that rose during apartheid years"². It also noteworthy to mention that NRA is fully committed to government Reconstruction and Development Policy (RDP) in its undertakings. In recognition of the imbalances of the past, the NRA projects always aim at developing the socio-economic status of the country through supporting BEE policies, SMME development, and promotion of the Affirmable Business Enterprises (ABEs) and job creation.

In 2003, the NRA approached the Human Sciences Research Council (HSRC) to undertake a study of the extent to which its project Main Contractors (MCs) and Subcontractors (SCs) were in compliance with the employment and equity requirements of the NRA.

Thus, the HSRC's understanding of the need of the NRA was for an independent assessment of its performance with regard to the use of small, medium and micro-enterprises (SMMEs) and affirmable business enterprises (ABEs) in both its 'Routine Road Maintenance' (RRM) projects and its 'Additions and Improvements' (AAI) projects. In respect of RRM, the target for the NRA is that 80% of the work awarded to its main contractors (MCs) is to be sub-contracted to SMMEs, of which 90% should be ABEs. In respect of AAI work, the primary criterion is that these SMME subcontractors (SCs) should have black ownership proportions of at least 30%. Additionally, the company should have significant black proportions in their management structures, amongst their skilled

¹ www.nra.co.za

² Horizon 2010: The Strategic Vision of the South African Agency Limited for the Year 2010.

professionals and in their unskilled labour force. A further requirement is that MCs should work in collaboration with local community-based Project Liaison Committees (PLCs) to ensure the equitable rollout of each project on site.

It is pertinent to bear in mind the NRA definition of the ABE, namely "a business which adheres to statutory labour practices, is a legal entity, registered with the South African Revenue Service and a continuing and independent enterprise for profit, providing a commercially useful function and which is at least 51% owned by one or more PDIs (Previously Disadvantaged Individuals) or in the case of a company, at least 51% of the shares are owned by one or more PDIs and whose management and daily business operations are under control of one or more of the PDIs who effectively own it provided, however, that, during the period for which the business has been operating or the three previous three financial years, whichever period is lesser, the average annual turnover of the business (excluding VAT and turnover generated in respect of work performance by other parties in a joint venture or in a consortium) does not exceed:

- R10 million, in respect of contractors who mainly perform civil engineering services
- R2,5 million in respect of labour-only SCs
- R10 million in respect of manufacturers
- R15 million in respect of suppliers
- R2,5 million, exclusive of any turnover generated in respect of out-sourced activities to perform, in respect of professional service" (NRA tender document)

The NRA is acutely aware of the shortage of black engineering and other road construction skills and expertise in the country. It wished therefore to determine the extent of compliance with equity and empowerment criteria, and by implication the viability and applicability of the criteria in the current context.

For the period 2001-2003, the NRA had commissioned a total of 147 projects. In each case, an MC was appointed to work with an engineering consultant. Of the 147 projects, 131 involved the appointment of subcontractors for different components of the project. The number of SCs varied from one to as many as 206, in the case of concession contracts for work on the N4 and part of the N1 in Gauteng and Mpumalanga.

The table summarises the distribution of the 147 projects in each region.

Table 1: Distribution of NRA projects by region and size

Project size	Northern	KZN-Mpumalanga	Southern	W. Cape	Total
Projects with no SCs	3	0	1	12	16
Projects with 1 to 5 SCs	4	19	32	15	70
Projects with 6 to 10 SCs	8	7	10	5	30
Projects with more than 10 SCs	6	13	11	1	31
Total	21	39	54	33	147

2. RESEARCH METHODOLOGY

The methodology utilised to determine compliance with empowerment and equity criteria was primarily a series of surveys of representative and geographically dispersed samples of the MCs and SCs. This was complemented by surveys of consulting engineers, route managers or resident engineers and community liaison officers. The intention of the different surveys was to collect information about the operations of the different parties on behalf of the NRA.

The study commenced with discussions with the NRA, to ascertain details and clarify expectations of the survey. In order to achieve representivity, a sample size of 31 projects was selected using project size and geographical region as the two selection criteria. The distribution of the sample is indicated in the table.

Table 2: Sample Size: MCs and PLCs

Project size	Northern	KZN-Mpumalanga	Southern	W. Cape	Total
Projects with no SCs (& no PLCs)	1	0	0	2	3
Projects with 1 to 5 SCs	1	3	3	3	10
Projects with 6 to 10 SCs	2	2	3	2	9
Projects with more than 10 SCs	2	3	3	1	9
Total	6	8	9	8	31

The monitoring reports compiled by the NRA's Consulting Engineer (CE) in respect of each of the 31 selected project MCs were perused to assess official perceptions of compliance with empowerment requirements. Appropriate survey instruments were then designed and fieldworkers were recruited in the four regions and trained to conduct interviews with respondents from each of the selected MCs, PLCs and SCs. The survey included the issue of skills shortages and solicited suggestions about the alleviation thereof. Respondents were asked to comment on the success or failure of working relationships with PLCs on site and within the communities concerned. Additionally, preferences and realistically achievable goals in respect of engaging ABEs were solicited.

Fieldworkers conducted interviews with the chairperson or a member of the PLC of each project, where possible. PLC representatives were asked about the project relationships and dynamics, to determine levels of satisfaction. They were also asked for suggestions to improve the structure of the community and business arrangements.

The intention was to collect data from SCs in the case of the 19 projects with between one and ten SCs (i.e. approximately 150 SCs) and a sample of 90 SCs of each of the 9 MCs with in excess of ten SCs working on a project. Given the proposed MC sample distribution and the average sub-contractual configuration of the NRA projects in each region, the proposed 240 SC interviews were distributed as indicated in the table.

Table 3: Estimated Sample Size: SCs

Project size	Northern	KZN-Mpumalanga	Southern	W. Cape	Total
Projects with no SCs	0	0	0	0	0
Projects with 1 to 5 SCs	15	15	15	15	60
Projects with 6 to 10 SCs	20	20	30	20	90
Projects with more than 10 SCs	20	28	28	14	90
Total	55	63	73	49	240

Fieldworkers requested details, inter alia, of the SC's business relationship with the MC, as well as a quantification of the SC's human resources, disaggregated by race and gender in respect of:

- The ownership and management of the company;
- Skilled workers and professionals employed by the company;
- Unskilled workers employed by the company.

The initial assumption was that each project would have an MC, CE, RE or RM and a CLO, and that there would be at least one and usually several or many SCs working on 28 projects, as anticipated in Table 3. However, the realised samples of respondents in all cases were all smaller than those drawn. Although this level of realisation is normal for organisational surveys of this nature, several reasons can be identified for the non-response of many of those from whom information was sought. In some instances it was discovered that particular SCs no longer existed or in fact, had never existed. The supposed contact persons were approached and expressed surprise that they had been designated as SCs, given their positions as employees of other MCs. Likewise, CLOs appear never to have been appointed in many projects. In some instances, respondents, in all categories, could not be contacted or refused to grant interviews. Lastly, significant numbers did not return their questionnaires in spite of repeated telephonic follow-ups. Nevertheless, in spite of the sensitivity of the employment equity-related questions during this period of political and socio-economic transformation in South Africa, the data gathered is rich and the analysis that follows elucidates the multi-faceted nature of contractual activities and relationships on NRA projects.

Table 4: Realised sample totals

Party	Sample	Realisation
Main Contractors	31	21
Subcontractors	240	104
Community Liaison Officers	28	9
Consulting Engineers	31	15
Resident Engineers/ Route Managers	31	14

3. MAIN CONTRACTORS

The realised sample of Main Contractor (MC) responses numbered twenty-one of the thirty-one from whom information was sought. The other one-third either refused to grant an interview or to return the electronic questionnaire that was sent to them. The respondent companies were almost equally divided between those who have worked on NRA RRM (48%) or AAI (52%) projects throughout the country.

Company Types and geographical distribution

Eleven of the MCs indicated that they were private companies. A further five were close corporations, three were JSE-listed companies and two were "other" types. Less than one-third (6) began trading in South Africa before the first democratic election year of 1994, one as early as 1902. The rest are relatively new operations, more than one-quarter (5) having commenced trading in the last four years.

More than half (11) of the MCs surveyed have head offices in the centrally-located Gauteng. Other provinces that accommodate MC head offices are the Free State, Western Cape and KwaZulu-Natal. Additionally, regional offices are most common in KwaZulu-Natal (30%) and the Western Cape (25%). The Eastern Cape is least represented in terms of regional offices (5%). Significantly, almost one-quarter of the regional offices had been opened during 2003.

Table 5: Distribution of head offices and regional offices of MCs

Province	GT	FS	WC	KZN	NW	MP	LP	NC	EC
Head offices	11	4	3	2	-	-	-	-	-
Regional offices	3	1	5	6	3	3	3	2	1

Company ownership

Amongst the sixteen companies that provided ownership details, six were black-owned; one was fully PDI-owned (black and white females); six included white females in addition to the white male shareholders; two had PDI-majority ownership; and one was white-owned.

Company Revenue

Company annual revenue amongst the MCs ranged hugely from R600 000 to R1-billion during the last three years. Median revenue was between R27-million and R40-million over the same period. Respondents indicated that they currently had between R12,7-million and R2,1-billion in scheduled contract work for the NRA.

Table 6: Revenue and value of scheduled NRA contracts

Year	Lowest	Highest	Median	No. of MCs
2000	R6-m	R300-m	R27-m	14
2001	R600 000	R600-m	R50-m	16
2002	R600 000	R1-billion	R40-m	17
Current NRA contracts	R12,7-m	R2,1-billion	R55-m	15

Workforce

Similar variations in workforce size were evident. The number of full-time equivalent (FTE) employees ranged from 6 to 1104. As far as contract workers were concerned, the range was from only two in one case, to 1068 in another.

Table 7: Size of workforce

Employee category	2-25	26-70	71-227	228-1068	Median
FTEs	5	5	5	5	70
Contract workers	4	6	2	5	40

An examination of empowerment at the different occupational levels reveals that at top and senior management levels, almost half (46%) of the companies surveyed had more white male than PDI employees. This proportion was similar in respect of professional employees, 42% of companies had more white male than PDI employees. In the case of the "skilled" employee category, 40% of companies had more white male than PDI employees. Amongst the semi-skilled and unskilled labour categories, all companies surveyed had more PDI than white male employees, only 29% having any white male employees at those levels at all. From an overall perspective, the average proportion of white males on the staff of the companies surveyed was 13%. This ranged from 0% in the case of a 20-employee black-owned company and 1% in a large (over 350-employee) BO company, to 34% in a large white-owned company and 40% in a small BE company.

Table 8: WM : PDI ratio at different occupational levels

	Percentage of MC companies			Total
	WM > PDI	WM = PDI	WM < PDI	
Top Management	46	27	27	100
Senior Management	46	15	39	100
Professionally qualified and experienced specialists & mid-management	42	0	58	100
Skilled technical & academically qualified workers, junior management, supervisors, foremen, and superintendents	40	0	60	100
Semi-skilled and discretionary decision-making	0	13	87	100
Unskilled and defined decision making	0	0	100	100
TOTAL permanent workforce	0	0	100	100

(WM= white males; PDI=previously disadvantaged individuals in terms of EE Act)

Half of the companies surveyed indicated that they had a published employment equity policy and half said that they did not have such a policy in published form. Asked what challenges they had experienced in implementing employment equity policies, less than half made substantial comments. One said that there were "no black civil engineers available" and that it is difficult to retain the services of "good skilled black people" owing to the "high demand". Another respondent echoed this reasoning, saying they had found it difficult to find "qualified black engineers with (a) minimum (of) ten years experience", these being in short supply in South Africa. One mentioned lack of work as a limitation to opportunities to implement EE, and conceded "lack of management commitment" as a further difficulty.

Another expressed the challenge as follows:

"The biggest challenge we experienced in our industry is the low literacy and education levels present in our workforce, which consists of mostly African Males. It is therefore a timeous (sic) process to uplift and train these members of staff to enable them to be promoted into higher levels within the Company Structure. Staff with enthusiasm and appropriate capabilities are identified and on-the-job training as well as external training is made available to these individuals on an ongoing basis."

Skills Development

In order to determine the extent of efforts being made to enhance skills within companies, respondents were asked what percentage of their total payroll was spent on employee skills development in the previous financial year. Almost half failed to respond to the question and of the balance, the range was from 0,02% to 10%.

Only 10% of respondents indicated that they had not adopted any specific approach to empower and fast track PDIs to take up career opportunities. Most said that they provided some form of ongoing in-house on-the-job training for employees. One company mentioned trainee programmes for foremen, site administrators and civil engineer technicians; another indicated bursary and apprentice schemes, mentorship and adult basic education and training (ABET) programmes. Another pointed out that they employed labourers based near the site of the road contract projects and were thus able to accredit them after in-house training on completion of the job. There was a mix of internal and external course sponsorship in other companies, including computer, clerical, HIV, as well as occupational health and safety training. One company indicated its proactive recruitment of PDIs at technikons and universities even prior to completion of their studies.

One company with over 1000 employees provided a published training and development strategy, which included principles such as that all training should be "the result of careful consideration, advance planning and consultation with those to be trained" rather than "training for the sake of training". Every position in the company was subject to ongoing monitoring and counselling, to determine progress made. Multi-skilling was seen as a priority, with management and supervisory training for employees "who have the potential to progress into these ranks."

Procurement

One third (7) of respondents indicated that their company had a published procurement policy. Four of these said that the policy targeted PDIs.

Current work for the NRA

Four respondents said that they had commenced their current contract with the NRA during the course of 2003 and a further three, during 2002. The majority (12) began working on their current NRA project in 2001 and only two had been working on their current projects since before 2001.

More than one-quarter (6) of the companies had worked on between two and five previous NRA contracts and five companies on six contracts or more. The remaining ten did not report having worked on any previous NRA contracts.

With one exception, all respondents indicated that they had obtained their current NRA contracts through the standard tender procedure. One indicated that "affiliation" to the concessionaire had resulted in their contract.

The nature of the projects included project management, widening and resealing of a national route, road rehabilitation or upgrading, resurfacing, routine road maintenance, road reserve maintenance, grass cutting, crack sealing, fencing, drainage, toll or tunnel operations, asphaltting operations, and new road and bridge construction.

Subcontractors

More than half (12) of the responding MCs indicated that they had databases of potential SCs. Employment equity was reported by two-thirds (14) of respondents to be one of the main criteria for selection of SCs. Charge-out rates, skills levels and capacity to do the work were reported by about half of respondents to be main selection criteria. Another criterion mentioned was the geographical location of the SC.

Table 9: Main criteria used by MCs when selecting SCs

	Capacity	Skills	Equity	Rates	Other
%	48	52	67	57	10

With regard to the SCs working on their existing NRA projects, it emerged that 47% were black-owned (41% of those working on AAI projects and 53,8% of those on RRM projects). A further almost one-third (32,5%) were black-empowered companies (29,5% of those on AAI and 35,9% of those on RRM). The remaining just over one-fifth (20,5%) were "other" South African companies (29,5% of those on AAI and 10,3% of those working on RRM projects). The overall 70,5% BO or BE SCs on AAI projects and 89,7% on RRM projects were thus extremely close to the targets of the NRA.

Table 10: BE status of subcontractors to the main contractors

SC status	AAI projects	RRM projects	Total
Black-owned company	18 (41%)	21 (53,8%)	39 (47,0%)
Black-empowered company	13 (29,5%)	14 (35,9%)	27 (32,5%)
Other SA company	13 (29,5%)	4 (10,3%)	17 (20,5%)
Total	44 (100%)	39 (100%)	83 (100%)

Just over one-quarter (27%) of MCs indicated that they had employed fewer BO or BE SCs than other SCs. A further 33% had hired more BO/BE SCs than other SCs. The remaining 40% had employed only BO and/or BE SCs.

The values of contracts for the SCs varied enormously from R57 000 to R45-million, both of these extremes having been awarded to BO companies. A comparison of the highest value jobs awarded by each of the MCs revealed that in 42% of cases, these went to non-

BO or BE companies. One-third (33%) of the highest value jobs went to BE companies and one-quarter (25%) went to BO companies.

Asked why they had subcontracted parts of the project work, almost two-thirds (62%) said that it was to comply with the 80% specification of the NRA. Others (19%) mentioned the need for specialised skills (19%) such as asphaltting; that it was usual company practice (14%) or that it was cheaper to make use of local SCs (5%). One comment was that "this was the way we did it since our first contract and it is compulsory now."

In interrogating MCs' understanding of the tender requirement, some (38%) expressed it in terms of the ABE and PDI empowerment quotas. Others interpreted the question in terms of criteria such as "experience", "price" and "management" or in terms of the actual job specifications such as "routine road maintenance" or "supply, delivery and installation of traffic control and monitoring equipment" or "road upgrading and toll collection concession". One comprehensive response included "experience and expertise, creation of local community employment, BEE and improvement of the infrastructure". One respondent simply said, "Yes", presumably thinking that the question was whether or not the company was complying with tender requirements.

Asked about the level of trust between MCs and SCs, 48% of MCs said that there was "strong trust" and 43% that there was "trust". The remaining 9% did not provide a response. In respect of support received from the NRA, 43% indicated that it had been "excellent" and a further 48% "satisfactory", the balance not responding to the question.

One-third of MCs indicated that contracts with some of their SCs were terminated before they were scheduled to finish. The reason for premature termination was usually poor quality workmanship. A few respondents mentioned corruption, desertion or that the SC concerned was "under investigation for non-compliance".

Respondents indicated that their companies had been working on their current NRA projects for between seven and thirty-six months, the median being about seventeen months.

Empowerment Strategies

Equity expectations in terms of government requirements (i.e. ABEs, SMMEs with high PDI equity) were conveyed openly in meetings or documentation for SCs at the tender stage by 62% of the MCs in the survey. Other methods used were monthly reports on HDI employees in the company or "local publications and in writing".

One respondent said that all of their SCs were PDIs and another remarked, "all SCs are aware in this period that equity is an issue and we have to deal with it".

In order to ensure adherence to NRA requirements, almost one-quarter (23%) said that it formed part of their contracts. Other methods used were ongoing quality checks (14%) and ongoing hands-on supervision and training (14%). Smaller proportions indicated that they requested the submission of affidavits or proof of company registration and PDI status. Others facilitated the recruitment of local labour or held monthly meetings. One

respondent said that their company placed "an experienced foreman with each team to train, lead and control them until their actions adhere to NRA requirements".

More than two-thirds (71%) of MCs felt that the affirmative action procurement policies of the NRA were achievable, 5% that they were not achievable and 24% did not respond to the question. One respondent said that it was "not very easy" but "achievable as we've proven on this project"; another simply responded, "we are doing it". Another indicated that it had worked well on previous contracts. Another said, the point system in the sub-contract document made the policies achievable. In one case it was stated that allowance had been made to claim for costs of training and management of ABEs and SMMEs. A further positive comment in this regard was that "to date we have been able to achieve their requirements" and that "they are realistic and everybody understands it".

From a more negative perspective, one respondent said that the requirements entailed time-consuming "paper management". One respondent who said both 'yes' and 'no' to the question about the achievability of the NRA policies, was of the view that they were "problematic" because of their effective "exclusion" of businesses "over the whole economic spectrum". A further pertinent comment was that "In some of the highly technical areas, no personnel conforming to the affirmative action requirements are available as yet. To expect the contractor to comply with the affirmative action policies in such cases is not possible. Over the longer term the policies may be achievable."

One MC's attached EE policy stated that "efforts will be made to ensure that Employment Equity plans and programmes do not impact unduly negatively on the job security, promotional prospects or other reasonable and legitimate interests of competent and committed members of non-target groups" and that "disciplinary action will however be taken against people obstructing transformation". Another MC's policy specified a goal as being where possible to "reflect the diversity of the economically active population in the region and sector in which the company's workplace is situated."

With regard to partnerships with multinational companies, only 14% of the surveyed MCs indicated that they had such partnerships. In one instance, the multinational was also said to be adhering to BE targets. Another said that their own BE targets were not being affected by the partnership. In only one of the partnership situations was there perceived to be a negative impact on BE targets because the multinational did not have any of its own BE targets in place.

Under half (43%) of the MCs reported that they were in receipt of tax incentives arising from SETAs.

Project Liaison Committees and Community Liaison Officers

Only one-third (33%) of MCs reported that there was a Project Liaison Committee (PLC). However, 48% of these claim to hold PLC meetings, half on a monthly basis (24%), 10% more frequently and 14% less frequently. It would, thus, be interesting to ascertain the attendance at such meetings. One respondent indicated that in spite of written invitations to all local authorities to nominate representatives, no response had been received seven months after the commencement of the project.

Almost one-quarter (24%) of MCs reported that their projects have community liaison officers (CLOs) who were selected by the local communities, a further 5% by the MCs, 5% by the SCs and 29% by other means (such as names being suggested by the PLC). More than one-third (37%) did not report having a CLO. One respondent indicated that there had been a CLO "at one time".

There was general consensus that no restructuring of the role of CLO was necessary. One MC indicated that training of a CLO had been held in a local township, but that the MC representative had been "attacked". Another suggested that the NRA should incentivise training and security costs. A further suggestion was that local community needs should be examined in order to set up guidelines for the CLO. In one case, the MCs made a plea that the CLO and the PLO should not be the same person as this created conflict. (The CLO on their project had been employed on site as a labour officer).

Other comments

A diversity of additional comments arose in response to the blank back page of the questionnaire, where "additional information" was requested. A complaint that emerged was, "With the benchmark for price being 80% of average and with the compulsory subletting of 80% to SCs, main contracts have been awarded at very low prices and SCs are going to get burnt seriously if this pattern is prolonged."

In one instance an attached letter from a municipal mayor expressed gratitude for courses in plastering and bricklaying that had been presented to local workers. The mayor then requested that the MC offer employment to some of the trainees on the roads project.

One respondent made the comment that the "NRA itself is not empowered" because it comprises "just white engineers". Another observed that CEs are "criminals" because they hold back funds for the purchase of signs, etc.

The NRA was also accused of judging a company on its engineer who is expected to have twenty years of experience. The implication here was that this was very difficult to achieve.

A further allegation was that the NRA "blocks" some companies from tendering for work because it encourages others to "under-quote" for the job. Another said, "people desperate for work are being pressurised to accept subcontracts at prices much lower than what is economically viable".

One respondent said that they "Did not know of one consulting engineering company that complies with the NRA's requirements". Another said that sureties will "ensure that SCs never become MCs" and this encourages "fronting".

Two final suggestions that were made were that the benchmark should be changed to 90% in order to "prevent the upward spiral of prices" and that the tender specifications should be modified so that "innovation and efficiency" are rewarded.

4. SUBCONTRACTORS

The realised sample of subcontractor (SC) responses numbered 104. This constituted a sizeable 43% of the original list of 240. Non-responses from the balance can be explained by several factors, as will become clear in this chapter. Not least of these were that many could not be traced owing to their lack of or change in contact details; the fact that they had never existed or that they had ceased to operate. In order to achieve the 43% return, we sought the assistance of other SCs who worked on the same jobs. This approach yielded contact details in a few cases. MCs and regional managers in such cases were also unable to assist with such information, as their records were frequently not up-to-date. It emerged that SCs often change company names, thus posing a further challenge. In addition, some of them did not have offices and even cell phone numbers had been changed. Sadly, five owners of the SCs who were in the sample passed away and people who took over said they did not have enough information to complete the questionnaires.

Number of SMMEs by project type

When respondents were asked to indicate the type of project in which they were involved, 37% did not answer the question, as they were not sure whether they were working on RRM or AAI projects. One of the basic reasons appeared to be that much as they might not have been interested in what can be regarded as technical information, SCs had no access to this information. This suggested a general feeling amongst SCs that 'as long as they have work to do' there is no reason for them to worry about details.

Two-thirds of the rest (42%) were involved in RRM projects and one-third (21%) in AAI projects. This reflects the skills levels amongst SCs, mainly appropriate for maintenance rather than complex engineering projects.

Geographic distribution of projects

A large number of the SC's head offices and satellite offices were based in Gauteng (23), followed by KwaZulu-Natal (20) and Western Cape (20), the country's three economic hubs. This uneven geographical distribution suggests that SMMEs are largely based in metropolitan areas where opportunities for them to develop can be maximised. There was only one SC based in Mpumalanga and no other satellite offices were located in that region. No SC had a head office or satellite offices in North West or Northern Cape.

Table 11: Geographical distribution of SCs

Province	GT	FS	WC	KZN	NW	MP	LP	NC	EC
Head offices	23	7	20	20	0	2	3	0	11
Regional offices	8	8	2	5	0	0	3	1	9

This imbalance in distribution raises questions of the role of these SMMEs in employment creation and poverty alleviation as it is people in small towns who tend to need such companies most urgently for purposes of employment, skills creation and skills transfer.

A rather large group of respondents (41%) said they do not have offices. This group comprised mostly individuals working as independent labourers and not as registered companies.

Type of company

About 80% of the SCs were close corporations, usually with less than 10 shareholders and 18% were private companies, the rest being classified as "others".

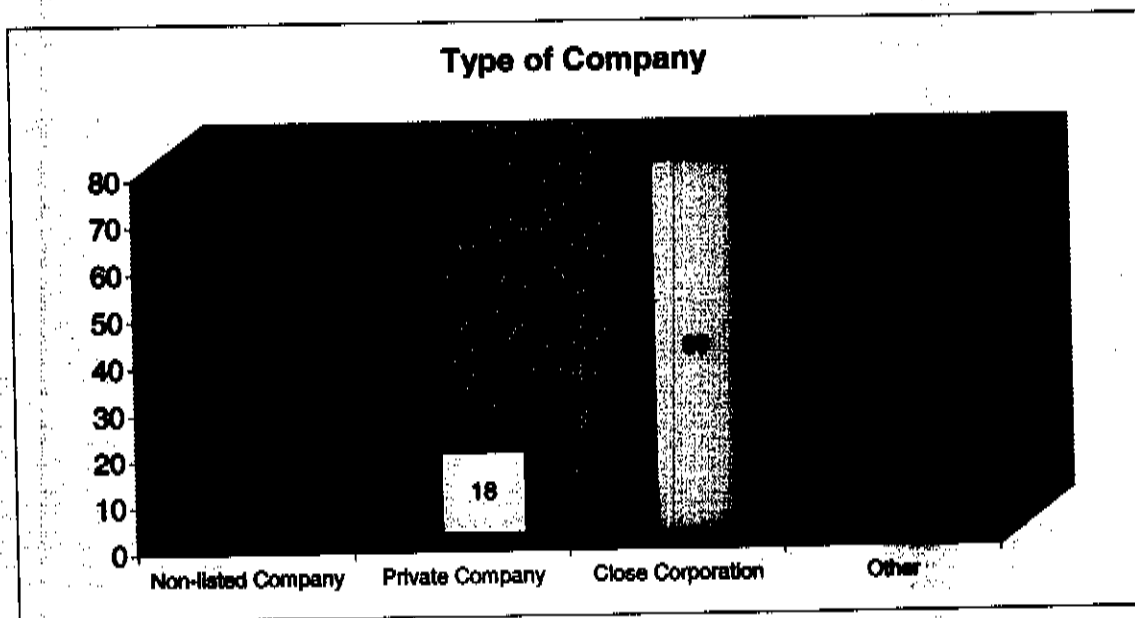


Figure 2: Subcontractor company types

Number of registered companies

About 88% of SCs were indeed registered. A total of 8% said they were not registered companies and 4% did not respond. Again, it should be noted that some work as informal independent persons. One of the respondents justified his case by saying "I am not a company, I don't have staff, therefore I do not see a need to register as the MC only calls me when I'm needed and that usually does not last for two weeks".

Some of the respondents were not willing to disclose their company registration numbers, as they were afraid that they might be exposed to the office of the South African Revenue Services (SARS) because they had not been paying tax and in some cases had not even registered with SARS.

Year when started trading

Many of the SCs started trading in 1998 as the next graph indicates. This was followed by a "breakout" again in 2001 and 2002. The oldest company was established in 1982.

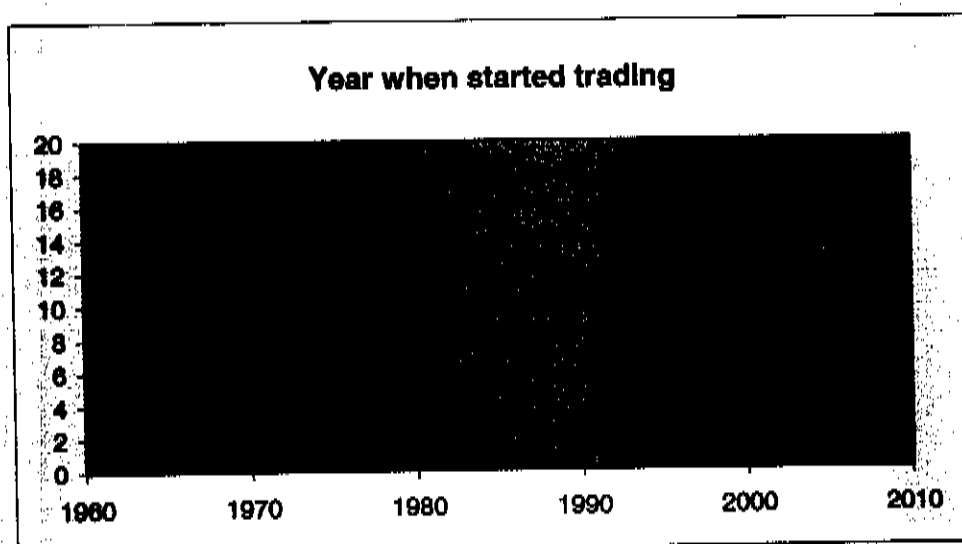


Figure 3: Year in which subcontractors started trading
(Note: NRA commenced operations in 1998)

SMME Categories

The SC included in this research sample work or specialise in a wide range of activities, as listed in the table that follows.

Table 12: Subcontractor work activities and specialisations

Asphalt laying	Automotive Engineer
Battery Supply	Bridge Repairs/Joints
Civil Contractors	Civil Engineering
Crack ceiling	Distribution of cleaning material
Fencing	Fibre & Data Networking
General maintenance	Grass cutting
Guardrail Installation	Landscaping
Manufacturing & supply of Bituminous	Manufacturing of Road Signs
Mechanical, electrical & Instrumentation	Patching / Rehabilitation
Pipe laying	Road marking
Road Painting	Road safety barrier Installation
Road signs	Security/electrical/computer/work area
Software Development	Stationary & Printing
Survey services	Traffic Control
Traffic data collection service	Transport/haulage
Tree Felling	Vegetation Management

Shareholding Structure

Of the 104 SC companies surveyed, 65 were black-owned, 8 black-empowered, 3 were "empowering" companies, 10 were "engendered" companies and 14 were "other" South African companies (i.e. white-owned). The remaining 4 did not provide sufficient information to determine their company status. The PDI company proportion on AAI projects was 65%, on RRM projects 91% and on undefined projects, 84%, all highly satisfactory statistics in terms of the NRA targets.

Table 13: BE status of subcontractors by project type

	AAI projects	RRM projects	Undefined projects	Total
Black-owned companies	13	27	25	65
Black-empowered companies	1	6	1	8
Empowering companies	1	1	1	3
Engendered companies	0	6	4	10
Other SA companies	8	3	3	14
Unspecified status	0	1	3	4
Total	23	44	37	104

Company Revenue

The annual company revenue of the SCs in the years 2000 to 2002 ranged from a mere R950 to as much as R71 million. The median revenue during these years was between R0,6-m and R1,6-m.

Table 14: Range of company annual revenue for Subcontractors, 2000-2002

Year	Lowest	Highest	Median	No. of SCs that provided data
2000	R10 000	R56-m	R600 000	42
2001	R10 000	R70-m	R1,6-m	57
2002	R950	R71-m	R800 000	63
Current NRA contracts	R50	R150-m	R685 000	56

To test the supposition that the SCs with the highest annual revenue might not be PDI-owned companies, annual revenue in 2002 (where provided) and value of current NRA contracts (where provided) were cross-tabulated with company status. The tables that follow indicate that PDI-owned or empowered companies were indeed dominant amongst the higher as well as the lower revenue companies.

Table 15: (a) Subcontractor company revenue by company status

Annual Revenue 2002	Black-owned	Black-empowered	Empowering company	Engendered company	Other SA company	Total
R950 – R30 000	13	2	0	1	2	18
R30 001 – R80 000	9	0	0	2	2	13
R80 001 – R4,5-m	10	0	1	3	3	17
R4,51-m – R71-m	10	2	0	0	3	15
Total	42	4	1	6	10	63

Table 15: (b) Value of current NRA project by company status

Value of current NRA contract	Black-owned	Black-empowered	Empowering company	Engendered company	Other SA company	Total
R50 – R80 000	9	0	0	4	1	14
R80 001 – R685 000	9	0	1	3	1	14
R685 001 – R4,5-m	10	1	0	2	2	15
R4,51-m – R71-m	9	0	1	1	2	13
Total	37	1	2	10	6	56

Number of employees

The median size of SCs in terms of employees was just over eleven workers. The number of workers and their employment status are partly informed by the value of projects. Many SCs can absorb up to eight workers full-time. Findings show that there is a relationship between age of the company and number of full time employees. That is, the older it is, the more employees it has. This can be attributed to the fact that the awarding of contracts by MCs is also based on good track records and the experience of the SCs. It means that the longer the SC company has been around, the greater the chance it stands of being awarded more projects. When commenting on the few fulltime workers in his company, one respondent said, "I need to make them permanent, and to do that I need a job or a project of six months or more". That degree of sustainability allows for employment of full time workers. The reality is that there are very few 'old' SC companies that still exist.

Number of full-time equivalent (FTE) employees in the SCs ranged from 1 to 359. With regard to contract workers, the range was none to 300 contract workers, only one company having no contract workers.

Table 16: Number of subcontractor companies by workforce size

Employee category	0-6	7-12	13-24	25-100	101-200	>200	Median
FTEs	26	26	17	19	3	1	11
Contract workers	21	23	19	15	0	3	11

There was no linear relationship between the BE status of the SC company and the size of its FTE workforce. In other words, there was no significant tendency for the smallest companies to be black-owned and the largest, white-owned. The table that follows indicates that MCs appeared to have subcontracted to black-owned, black-empowered, empowering, engendered and "other" companies of all sizes. PDI-owned or empowered companies dominate in all SC categories in terms of FTE workforce size. The magnitude of the PDI dominance is overall very close to NRA criteria, namely at 85% of all SCs. The level is 81% of very small companies (1-6 employees); 88% of the 7 to 12 employee companies; 91% of the 13 to 30 employee companies and 71% of the largest companies (with from 31 to 359 FTE employees).

Table 17: Size of workforce by subcontractor company status

FTE employee total	Black-owned	Black-empowered	Empowering company	Engendered company	Other SA company	Total
1-6	16	3	0	2	5	26
7-12	17	3	1	3	2	26
13-30	16	1	0	4	2	23
31-359	11	0	1	0	5	17
Total	60	7	2	9	14	92

Selection of the workforce

When respondents were asked about the criteria used during selection of the workforce, about 86% said employees with relevant skills are selected. At times, projects are very short, allowing no time for the training of employees without basic skills. Almost all respondents (97%) said candidates with experience are the most preferred, as again this would mean less time spent on training or will not need training at all. Only 32% use race as the criteria when recruiting workers. About 41% use gender and 38% use qualifications when selecting workers whilst only 6% chose the other category.

Table 18: Main criteria by SCs when recruiting workers

	Experience	Skills	Gender	Qualifications	Race	Other
%	97%	86%	41%	38%	32%	16%

Those that use 'qualifications' as a main criterion were mostly involved in AAI projects and specialised in activities such as software development, civil engineering, battery manufacture and supply, civil contractors, fibre and data networking, land survey services, vegetation management and mechanical, electrical and instrumentation.

Project Details

In order to establish how SCs access the information regarding upcoming tenders, they were asked how they found out about their current projects. About one-quarter (27%) said they learnt about their current projects from the tender bulletin whilst 24% said it was through the newspaper advertisements. A remarkable number (15%) of respondents said they found out through their friends.

Respondents were also asked how they obtained their current contracts. Over half (53%) said it was through the submission of a tender, whilst 19% said they submitted a quotation. It is interesting to note that about 16% said it was through their contacts with the MC. In support of the above, about 45% respondents said they have worked with their current MC before, thus indicating the importance of having on going contact with MCs. A further 4% obtained their contracts through the submission of proposals, 3% by a selective tender invitation and 4% by "other" means. Respondents were also asked why they think their company got the contract.

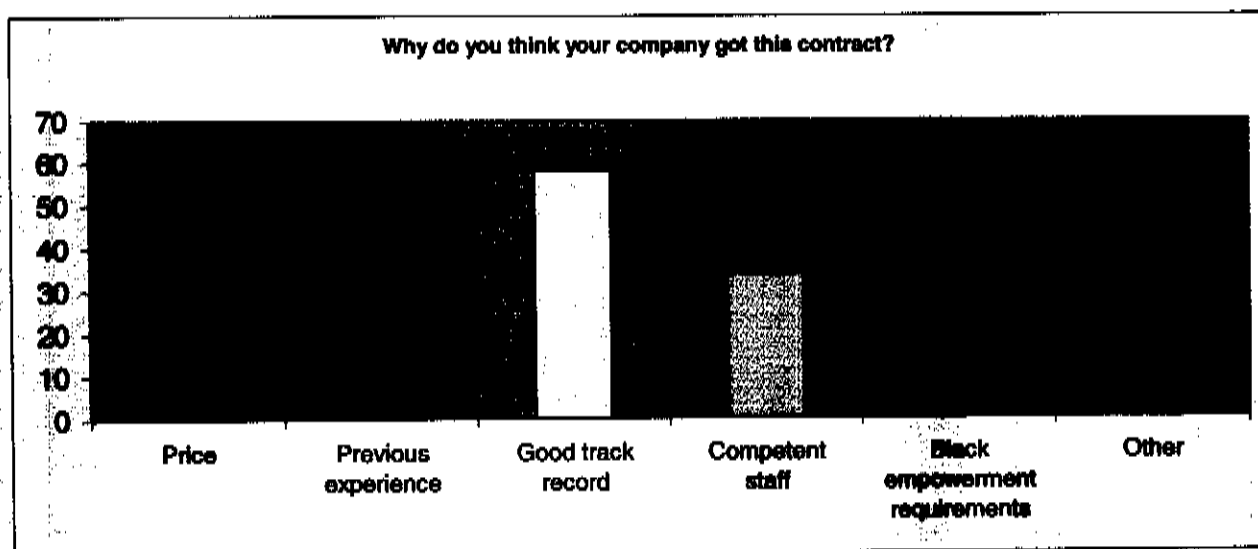


Figure 4: Subcontractor perceptions of reason for award of contracts

The majority of the respondents (60%) felt that they were awarded contracts because of their previous track record in the field. It has been mentioned above that it is more difficult for emerging SCs to land projects. This again indicates that SCs stand a better chance of being awarded projects if they have been operating for a certain period and most importantly if they have worked with that particular MC before. In line with this, about 44% argued that they were awarded the contract because of their experience in roads projects. Whilst on this topic, one should note that about 37% respondents said their current projects were their first road contracts ever whilst 63% said they had been involved in such tasks before.

Almost half (45%) said they won the contract because of their quotation. However, there were major concerns by SCs regarding this issue. The major theme that continuously came up was that MCs tend to award tenders to SCs that charge them the lowest rates. As a result they are forced to keep their quotations very low and at times below the normal charge rate. One-third (33%) said they were awarded contracts because they have competent staff, whilst only 29% said it is because they fulfilled the black empowerment equity requirements.

Contract agreement between Subcontractors and Main Contractors

Respondents were asked whether they have a contract with the MC. The majority (86%) of the respondents said they had contractual agreements with the MC, whilst only 14% said they did not have any contract with the MC. In some cases, parties are bound by verbal agreements or there was no agreement at all. They are only called when their services are needed. This is usually the case with SCs of tollgate service providers. One of the respondents said "we supply cleaning material, in this case we supply them with toilet paper and orders are placed via the telephone and we usually deliver products up to the value of R100".

To determine whether SCs knew with whom they have a contract, they were asked who the contracting parties were in their projects. Only 35% answered and amongst those, half claimed to have a contract with the NRA instead of their respective MCs. Some did not

answer the question because they felt that it did not apply to them, possibly because they did not have any formal contract with the MC.

Names of previous clients and services provided

The research indicates that services of the SCs are mostly required in projects initiated by government departments. The Johannesburg Roads Agency, municipal bodies, and the Department of Public Works were amongst the other main clients of the sampled SCs. Large construction companies such as Penny Farthing, Grinaker, Midfran CC, Tuncor and Murray & Roberts were also mentioned as users of their services. Large companies using the services of SCs are only located in the major metropolitan regions. Asked whether they had other projects lined up, 46 SCs said 'no' and 54 replied in the affirmative.

National Roads equity requirements

About 49% said they were "satisfied" with the equity requirements which are important determinants during the selection and awarding of tenders, whilst 14% said they were "very satisfied" with the system. It is a positive outcome that only 9% claimed they were dissatisfied whilst the other 4% said they were "very dissatisfied". About 14% said they are "neither satisfied, nor dissatisfied" with the NRA equity requirements (out of 93 respondents to the question).

Respondents gave up to three suggestions for improvements to the NRA equity requirements to make tender expectations attainable. Many suggested that bigger contractors should not be allowed to tender for small projects. This would mean that only SC companies with equal expertise and experience in the field should be allowed to compete. They felt that it was unfair that they have to compete with large companies that have been in the industry for a long time because the latter end up getting all the projects. Some said the small emerging SC companies should be given more recognition, the implied allegation being that projects are usually awarded to bigger and more experienced SC companies.

Some SC respondents stated that in some cases, MCs themselves also compete for the projects. All they do is use the names of their own labourers as founders and owners of the "new" companies. They establish the companies under their employees' names and compete for the project. This is one of the reasons why many SCs feel that the NRA should enforce its equity requirements and undertake continuous monitoring of the MCs that are awarded the projects.

Another argument put forward was that MCs use black labourers to increase their equity quotas and thereby to get projects. At times, they do use real SC companies; however they mentioned exploitation of SCs by the MC companies. They maintained that MCs change contractual agreements and even budgets without any consultation with SCs or the NRA. It was therefore suggested that the NRA should send SCs copies of the MC contract documents. This suggests that SCs might prefer contracts directly with the NRA instead of with MCs.

Others said the NRA should make the information regarding upcoming projects more widely available and accessible to the SCs. The underlying assumption was that it would

be better to know about proposed projects before the MCs. They feared that MCs were quick to collaborate with their favorite SC companies or other established companies to win over the projects.

Another concern was with regard to the length of the projects. According to the SCs, if projects were to run for about six months or more they would become sustainable and the chances of bankruptcy would be reduced.

Regarding the award and adjudication of tenders, there was a wide consensus amongst the respondents that tenders should be awarded fairly to the deserving SC companies. They sensed that only companies that were close to the MC companies get awarded projects. In addition, they also felt that parties like the CLO or the community representative should take part in the tender adjudication process. Some SCs wanted quicker tender adjudication by the NRA. They felt that the NRA took too long to make decisions regarding who has won the contract.

Some complained about the difficulty in understanding the tender documents and suggested that it should be simplified. Taking into consideration their levels of education, they felt that the tender documents were made complicated to confuse and cheat them. Some proposed that the NRA should take responsibility for training them on how to complete tender documentation. Others felt that it should be the responsibility of the MC to train them. In addition to that, some argued that the MCs should channel some of its money to training of the SCs so that they could enhance their skills and be able to write something more substantive in the tender applications.

Interestingly, there were some SC's who felt that the point system should be amended to accommodate non-black-owned companies. Their basic argument was that the NRA should consider using non-BEE companies who are more experienced and would be cheaper than the BEE companies because they would not require training. One of the respondents said "Avoid giving contracts to inexperienced fly-by-night contractors, which in the long run cost more". In addition, some proposed that the NRA should look at the experience and qualifications of the applicant instead of looking at race.

In general, the majority of the SC's suggested that the NRA should make its equity requirements more stringent and implement some ways of ensuring that in reality, MCs do comply with what is stated in the tender documents. About one in six (17%) said there is no need for any improvement to the tender equity requirements.

Project Management

When asked about the details of the strategic decision maker in the company, 28% indicated that it was the CEO whilst another larger group claimed that its Board of Directors made the strategic decisions. It emerged that Boards of Directors sometimes comprised the 'real CEO' of the company as well as a person 'claimed' to be the CEO in order to meet the NRA equity requirements.

Relationships with different parties

1. Project Liaison Committees

Out of 81 respondents, 38% said they had never had a meeting with a Project Liaison Committee (PLC). It should be noted that only 5% said they did not have PLCs on their projects. Only 1% said that they met with the PLC. About one-quarter each met the PLC weekly or monthly. About 43% of SCs were very happy in their relationships with the PLC. A rather bigger group (30%) said they are not happy with the relationship they have with the PLC. A total of 17% said the PLC gave them "no support" in the completion of their projects. SCs raised concern over the PLC bias towards MC companies. They suggested that regular meetings with the PLC should be organised so that they could voice their needs and grievances. They also proposed that SCs should be allowed to participate in PLC meetings because PLC allegedly did not present SC grievances. Another complaint was that PLCs took too long to resolve issues and at times not until projects were completed.

2. Community Liaison Officers

About one-fifth (21%) of respondents said they had never met with a Community Liaison Officer (CLO). This was not necessarily because there was no CLO in the project, as only 10% answered, "there is no CLO". Just fewer than 14% said they met the CLO weekly and 8% said they saw their CLO on a daily basis. More than half (58%) of the responding SCs were happy with their relationships with CLOs. A further 23% were indifferent concerning this relationship and 19% were not happy with the relationship.

3. Main Contractors

Almost one-quarter (24%) of the SCs said they were 'unhappy' with their relationship with their MC. On the other hand, 50% were 'happy' with the relationship and 10% said they were 'neither happy nor unhappy'. It was thus contrary to expectations that many SCs said there was no need for improvements in their relationship with the MCs. However, those who proposed improvements had so much to say.

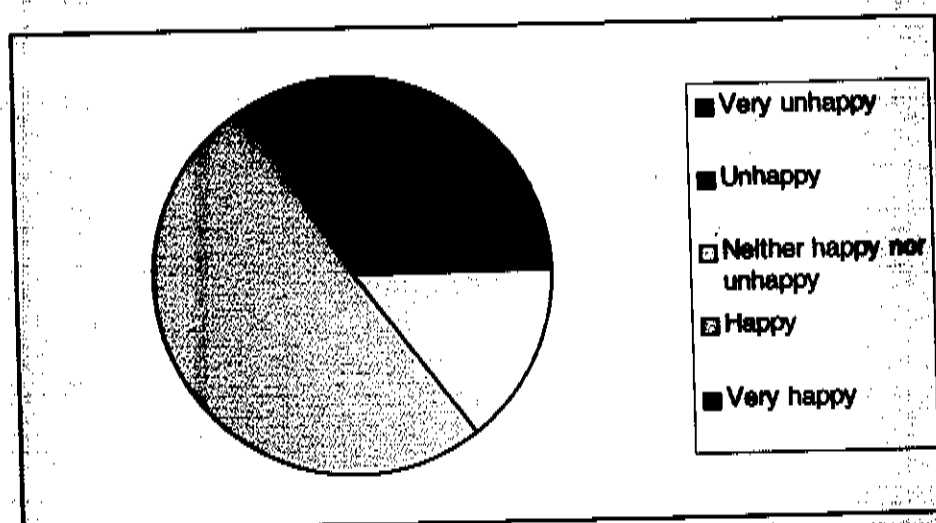


Figure 5: Subcontractors' perceptions of their relationships with MCs

A number of respondents said the MCs should pay them on time. It came out of the discussions that at times MCs did not adhere to the contractual agreements they had with the SCs. The general feeling amongst SCs was that there was a lack of communication between themselves and their respective MC companies. They said MCs did not communicate with them regarding decisions taken in projects. They said there was no transparency in their relationship with MCs. Respondents stated that they knew that sometimes MCs also received payments 'very late' from the NRA, but because they did not inform them, they were often left with no explanations whatsoever. As a result, SCs suggested having more regular meetings with MCs, in the hope that they would be updated about all problems and amendments in contract documents.

There was also some evidence that some MCs did not pay SCs for the works completed. This was a major cause of tension between SCs and MCs.

SCs argued that they wanted to be given a chance to quote for work for MCs. Some said at times the MC came up with the amount he was willing to pay. In such instances, the SC was expected either to agree on the price and carry out the tasks or to turn down the offer. The latter option was highly unlikely as they were always desperate for projects.

It was also suggested that the MC should at least have a basic understanding of what SCs are doing on site. They believed that if the MC knew what their tasks involved, they would stop underestimating the cost of different components of a project and start recognising the role of SCs in the successful completion projects.

Some SCs suggested that they should be allowed to participate in the selection of the CLO. In addition, they felt that MCs should offer CLOs training to improve efficiency. They also saw one of the MC's responsibilities as being to inform the community about projects taking place in their areas.

4. Other subcontractors SCs on site

The majority (70%) of SCs were very happy with their relationships with other SCs on site. Only 4% expressed unhappiness with these relationships. One of the reasons for their unhappiness was that MCs tended to favour some and give work to them rather than to the SCs for whom the work had originally been intended.

5. Communities

SCs felt that it was of paramount importance that communities be involved in projects taking place in their respective areas for the benefit of and for the successful completing of the project. A large number of SCs complained about community members stealing materials and machinery on site. The idea was that, if they were invited to take part in projects through employment, they would assist in safeguarding any property on site. One of the respondents said "even for our security, it is important that we have some labourers from local areas who know the place well to warn us and notify us of any concerns that the community might have regarding the project". There was also some scattered evidence that community members sometimes steal and vandalise property on site so that project managers could give them employment.

There was also a general feeling that MC's should invest money in educating the community or even informing local communities about the role and value of projects taking place.

6. Government

SCs said the government should make projects of a similar nature available. They also felt that it should make loans available for the emerging SCs. Whereas most SCs obtained money from banks in order to get into these projects, the reality is that banks charge them high interest rates. SCs thus felt that government should make some provision for their needs in order to facilitate the successful implementation of BEE. The general feeling was that the government should take a more active role in these projects, particularly in respect of skills training.

7. National Roads Agency

About 30% of SCs said they were neither happy nor unhappy with their relationship with the NRA. One of the basic reasons behind this was that they had either a minimal or non-existent relationship with the NRA. However, the general response was positive, more than half (52%) indicating that they were happy about their relationship with the NRA.

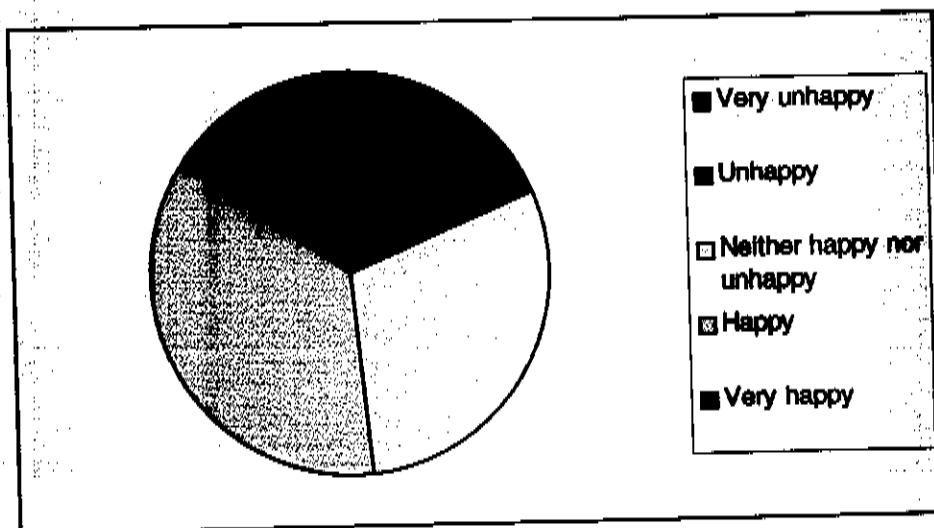


Figure 6: Subcontractors' perceptions of their relationship with NRA

SCs were also asked to rate the levels of support they got from the NRA. Almost half (47%) indicated that it was good and 10%, said it was 'neither good nor poor'. More than a quarter (27%) said that the support was either poor or that there was no support from the NRA. The remaining almost one-fifth (19%) of responding SCs felt that this question was not applicable to them.

8. Route Managers/Resident Engineers

With the aim of assessing the role of the Route Managers (RMs) and Resident Engineers (REs) on site, SCs were also asked how often they meet with the RM or with the RE.

How frequently do you meet with the RM/RE

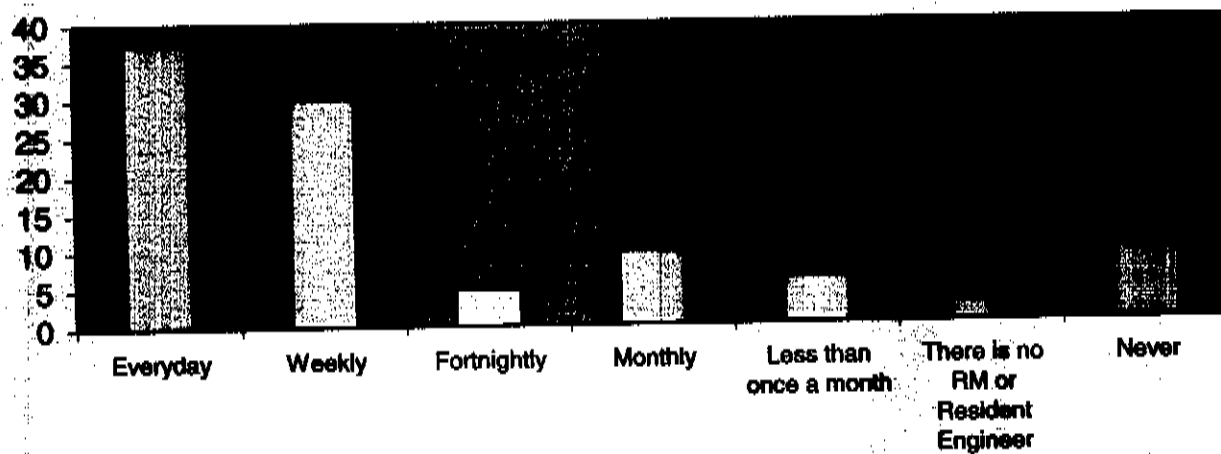


Figure 7: Frequency of SC meetings with Route Manager/Resident Engineer

Almost one-third (31%) of SCs said the RM or RE was on site everyday and a further one-quarter (25%) said they saw him weekly. Eight percent said they had never met the RM/RE and 2% said they had never seen the RM/RE on site. Those who said they had never met with the RM/RE said they communicated with him through the MC. They were also asked to rate how happy they were with their relationship with the RM/RE on site. More than half (57%) of SCs indicated that they were happy about their relationships with their RMs/REs. Just over one in eight (13%) were neither happy nor unhappy with the relationship. This indifference may well have been attributable to the lack of contact identified above. Those who were not happy about their relationships with the RM/REs believed that the RM/REs often took the side of the MCs in the event of a dispute. One respondent made the plea that "Route managers must not gang up with the MC against SCs".

Key skills to complete the project

There was consensus among SCs that project management was a crucial skill necessary for the success of the project. Many mentioned that the ability to manage effectively and to deploy labourers in a way that would finish the task at hand within the stipulated deadlines was very important for growth in this industry. They argued that many companies performed below expected levels as a consequence of team conflicts and interpersonal problems.

With regard to workers, two types of skills were mentioned: generic and project specific. In the generic category were commitment, motivation, dedication, interpersonal skills, ability to finish tasks on time, trustworthiness and problem-solving skills. Even though a number of SCs said, "there are no specific skills essential to complete the project at hand", it is irrefutable that the aforementioned are important basic skills.

Project specific skills mentioned differed depending on the type of work carried out by different SCs. These were identified as follows:

- Haulage Company – excellent driving skills
- Vegetation management- good knowledge of weed control
- Tree felling- ability to climb a tree/ physically strong
- Kerbing/ kerb laying
- Software development- basic programming skills
- Gabion erection- concrete skills
- Road surfacing- experience in working with tar

Training

The short-term nature of the projects posed serious challenges to SCs as well as MCs. This phenomenon is present across the industry and the consequences are mostly felt in the areas of training and development. For the MCs, it increases reluctance to invest in the SCs by training their employees even though that is part of the tender requirements. This in turn tends to result in an exodus of newly acquired skills from the SCs to other companies.

Another challenge is the general difficulty of career planning in the context of the uncertainty related to short contracts. This tends to increase employer's incentives to "buy" skills rather than "build" skills, which in turn affects the motivation of workers, which is critical for the success of any project. More than half (51%) of the responding SCs said they did not have any training programmes available.

Respondents were asked to indicate whether they or any of their employees had received training in any of a range of listed skills. These were pitching of side drains, concrete lining of side drains, kerb laying, pipe laying, sidewalk construction, patching (pothole repair), guardrail repair, bridge joints, white lines, erection of sign posts, sign post repair, drawing up of budgets, drawing up of proposals, drawing up business plans, preparing tenders or any other training. The figure following indicates that 50% of the respondents had been trained to tender and 42% to draw up a proposal.

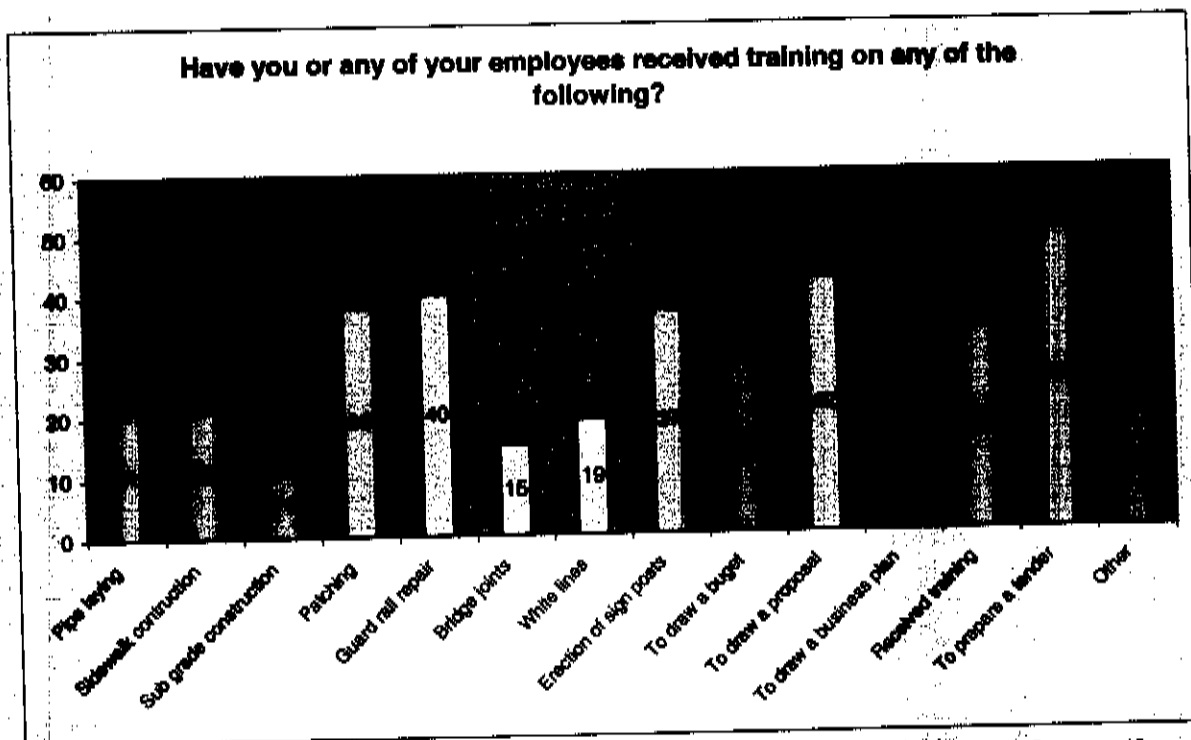


Figure 8: Types of training received by Subcontractors and their employees

Three-quarters (75%) of the SC respondents said they obtained these skills through training at work and 55% said from previous experience. One in twelve (8%) said workers had acquired the skills at school and 18% from post-secondary qualifications. Almost another quarter (23%) learnt the skills in off-site (classroom) based training. Only 4% said they learnt those skills through training by municipal authorities.

When asked to rate their staff regarding its ability to complete the given task, 61% of the respondents said it was "good", 27% said "excellent", 9% "adequate" and only 1% answered "poor". The majority (72%) said they had not had to repeat any component of the project, whilst 28% said they had.

Performance Evaluation

Most SCs stated that they assessed the performance of their employees by project completion. There were also those who said they looked at the time taken to complete the task at hand. A significant proportion said they did daily inspections on the work done, to see to it that everything had been done according to the specifications. One respondent said, "I look at the number of errors and mistakes" and then decide if the person is competent or not, whilst others said they look at their ability to work harmoniously with others. Many did not have formal performance assessment systems in place. One SC said, "we do not have any offices and it thus becomes difficult to do performance appraisals". More than two-thirds (69%) of SCs said there was a signed performance agreement between their company and the MC. Almost half (45%) said there was a signed agreement between management (subcontractor) and individual staff members. Over six in ten (63%) said that objectives, responsibilities and expectations of SCs were clearly defined by the MC.

Some interpreted the question about performance evaluation as if they had been asked about the performance of their staff, and responded "very good" or "excellent".

Financial Issues

When asked where they got money for their current projects, just fewer than 50% said they got it from the bank in the form of loans and overdraft. One-third (33%) claimed that they used capital or money they had been saving.

SC's were asked whether they had cash flow problems. Out of 91 responses, 35% said that this was the case and 65% said that they did not have cash flow problems. SCs listed a number of reasons for their cash flow problems. The major reason mentioned was "late payment by the MC". After SCs have used their money for materials and other needs to successfully complete the project, they are left with no money and only the knowledge that the MC would pay them to keep going. They said that the MC would at times pay them for two months of work and tell them that the NRA had delayed the processing of claims. They thus insisted that the NRA should collect claims on time so that the MCs could also get money in time to pay its SCs by the last day of the month.

To some, the reason for their financial crises was because "the contractor did not pay us". This was the case with many SCs that were involved in previously completed projects that no longer existed. One of the SC's said "you get so excited when you get your project and you think you have reached a break through. You use all you have, your money to buy machines and your strength in trying to impress the MC and to make a name for your company. We were told that we would be paid at the completion of the project. However, we were not aware that the NRA was paying the MC at the completion of every section. The route manager was also in a mission with the MC. At the end of the project, we were not paid". According to the respondent that particular MC owed many people money and the owner fled to France after being kicked out of the roads projects by the NRA. Still, even though the NRA knew of what was going on, SC's were not even compensated.

Some SCs said that running costs were too high, that they used up all the money they had and ended up relying on payments by the MC for work completed to survive, and be able to pay labourers. Some said tender rates were extremely low and that they were not even in a position to make profits because they used all the money in buying machinery. On top of that, some said the fact that they did not get benefits made things worse as they had to pay for everything themselves. They said low rates were actually de-motivating, as they could not, at times, even afford to pay their workers.

Some were very unhappy because the MC had cut the budget after the contracts has been signed. They said they had to do more work than was agreed upon in the signing of the contract. Some claimed that government cut the budget, that is they got less than expected whilst others argued that adding to their financial strain was the fact that they still had to pay about 35% of their income to SARS.

Suggestions to improve efficiency

SCs were asked to suggest any improvements they felt should be implemented to improve efficiency. The main theme that kept recurring was the outcry about late payments by the MCs. SCs claimed that they became bankrupt after investing all their money in a project in the hope of getting returns in time. Other SCs said the NRA itself should be responsible for paying the SCs or at least devise some means of making sure that the money gets redistributed to the SCs. Some said for SCs not to collapse, the MC should pay them better rates.

Many also felt that they should have more regular meetings with the MCs to discuss the progress of the projects and to inform the MCs of their needs and difficulties. In many cases they also mentioned that there was lack of transparency as the MC sometimes amended the contracts without informing the SCs. One of the respondents complained "we were awarded two contracts: kerbing and down-chutes. From the onset we informed the MC that we had no previous knowledge or experience of both the above and requested training which we never received. When the MC took away our down chute work, my skilled employees deserted me. Having taken the job, they did not consult with PLC nor did they inform us. We only noticed when we saw them doing works themselves". This clearly captures the nature of the non-transparent relationships between some MCs and their SCs.

Other SCs said the MCs should be fully committed to BEE. One SC commented that MCs "just get a black man from the street and send him to tender for projects. He will be the CEO in the NRA books but in reality he is still the truck driver" whilst another one said, "BEE policies are treated as non-existing". Many also suggested that the NRA should do some follow-ups on the projects awarded to the MCs in order to monitor if there were any changes regarding the ownership of SCs. One respondent said, "most white-owned companies are fronting, and the NRA should intervene. Black people are bought by whites to be owners". Interestingly, one black SC admitted to having being used for this purpose. He said, "it was very nice, I was very young by then and always getting bonus and I had no reason to complain".

There was a vocal minority of about 4% who argued, in the words of one respondent, "Awarding of tenders by SANRA should be based on qualifications and experience rather than historical disadvantage". In agreement was another respondent who said "the government should decide when they are going to stop Black Economic Empowerment because it can't go on forever and it's really been on for a long time now". Others (2%) said the points system should be abolished. One SC respondent expressed his frustrations thus: "discrimination against whites should stop". He felt that through BEE, whites are excluded.

There was again a general appeal for longer contracts to improve sustainability. To some, the fact that they normally get short contracts meant that they were out of business for months whilst searching for other projects. When that happens they lose workers to other companies. Another respondent said the NRA should consider employing Development Officers on a fulltime basis.

On a positive note, one respondent said "I have been doing works for the NRA since 1999, I must admit there has been a vast change, now we have a contract that prevents abuse and under-payments by big companies even though I still feel that more can be done".

In addition, respondents were asked to state any "other difficulties or needs experienced in the projects". What emerged could be classified either general or project-specific. Under general needs and difficulties, 8% raised concern over "low profits" and "very low budgets". One SC suggested, "MCs should downsize their profit margins for us (SC) to survive". Another small group (3%) demanded explanation of the pricing system used by MCs because "SCs end up having lost more than what they have invested into a project". There was widespread agreement that SCs should be permitted to contact the NRA directly so that they were in a position to explain their needs and expectations.

With regard to project-specific needs and difficulties, one respondent from a security company said the dog they were using to patrol should be replaced with an armed security guard. Another one from landscaping services said, "It is difficult to work with the Resident Engineer who knows nothing about landscaping" because he did not give them the necessary support. There was also consensus among SCs that MCs should provide them with the materials and equipment to use on site. Another SC said, "because of SCs poor financial standing, they end up hiring tools and machinery from MCs". For those in transport or haulage companies their basic need is to have more trucks. They said that since there was no standing-time fee they needed at least to have spare trucks in case of breakdowns. Those involved in grass-cutting, guardrail installations, kerbing, V drain construction and sub-solling also complained about rainy weather which slowed them down and necessitated quicker work afterwards to meet the deadlines.

5. COMMUNITY LIAISON OFFICERS

Nine community representatives or Community Liaison Officers (CLOs) were interviewed and all but one had been selected to serve on a Project Liaison Committee (PLC) during the last three years. The exception had been selected in 1996. Asked what they saw as their primary roles, four said that it was to recruit PDIs for contract work and to liaise with SMMEs and the workforce. Four mentioned that they were expected to assist in the resolution of labour problems and to mediate in the appointment of local labourers. Two felt that it was their duty to ensure fair labour hiring practices and two, to act as a liaison person between the site agent, the SC, the community and the employees. Other roles mentioned were to help the community in the protection of their property and to maintain occupational health and safety.

Selection as CLOs

The CLOs were asked how they came to be selected for the positions. Twelve responses were provided (i.e. more than one per respondent). The most common was "by the MC" (6), followed by "democratic voting" (3), advertisements (1), "suggested by PLC member" (1) and "previous experience" (1). None had been selected by the SCs. All respondents (8) thought that experience had been a criterion for their selection as CLOs. Six ascribed it to close relations with the community, three to contact with the MC, two to qualifications and one, to skills or union involvement.

One CLO said that he had a university degree and three, post-matric diplomas or certificates. The others had matric or Grade 11 certificates. Asked what skills and expertise were required in order to perform the CLO role effectively, the most common response was communication skills and interpersonal relationships (7). Other characteristics mentioned were having knowledge of local structures, being supported by the local community (3), being knowledgeable about the Labour Relations Act and Employment Equity Act (3), having empathy and being a good listener (2), being responsible (2), being positive in attitude (2), having problem resolution and negotiation skills (2) as well as creativity, bravery, knowledge of languages and human resources and a reputation as a community leader. Most respondents indicated having had more than three years as community representatives. It would seem that most CLOs also belonged to local community fora or neighbourhood watch organisations, indicative of an interest in crime deterrence. Most of the CLOs also played a role in religious, community-based or political structures.

Project dynamics

Asked which parties attend PLC meetings, MCs, other community members and RMs were the most frequently mentioned. Only half of the CLOs interviewed felt that the human resources of the SCs were adequate for the successful completion of projects. Reasons for success were attributable to the SC's ability to complete projects within stipulated time frames, the amount of equipment that SCs had at their disposal and the degree of support and trust that they had in the local community. Lack of success, on the other hand, was explained by a lack of suitable equipment or appropriate experience. A few respondents were uncertain about what to say, except to refer to the gap between established, experienced (read: White) and new, inexperienced (read: Black) SCs. In short, for some

respondents, the human resources available to complete projects successfully or not depended for some SCs, at best, on having been advantaged before, and at worst, on being previously disadvantaged.

Six of the nine respondent CLOs suggested that only local companies should be trained and employed as SCs on projects. Three felt that community workshops and feedback sessions would enhance community involvement. Other suggestions were that more decision-making powers should be given to communities; community activism should be sponsored; radio stations should be used to increase project exposure and that skills training in laboratory work, carpentry, road earthworks and other roads-related skills would add value to projects. Seven CLOs were of the view that government should be prominent in encouraging training. Four thought that MCs should take this role. Other potential encouragers of training should be the NRA and radio stations. The types of training received by workers on the projects surveyed were technical training in-service and/or on site, road safety, basic road construction, basic financial management, tourism and HIV/AIDS counselling. "Skills enhancement training workshops" and "discussion programmes" had also taken place for some.

CLO involvement in projects

On being asked whether as members of the PLC they got paid for services, all but one of the respondent CLOs indicated that they did. For six of the CLOs, the MC was the employer who paid them and for two, the NRA took this role. Seven CLOs indicated that they devoted in excess of 160 hours per month to their projects. One spent 64 hours per month and the other did not provide a response. Five CLOs indicated that they were not permitted to work on the projects during their terms of office as PLC representatives. Three said that they were allowed and one that he could only work as the CLO. None of the CLOs had family members involved in the projects.

Five CLOs met with the site agents every day, one met three times per week and the rest on a weekly, fortnightly or monthly basis. Meetings with RMs were less frequent, only three CLOs indicating that this was daily. Five met the RMs weekly and the rest fortnightly or less. Two CLOs met daily with SCs, five weekly and one, fortnightly.

At PLC meetings, the most frequent agenda items were labour and SC problems and SMME grievances. Other issues discussed were welfare/charity and involvement of the community, local contractor improvements and occupational health and safety. Less common were skills development, community problems (e.g. livestock on roads), the state of the project, labour relations between subcontractors and workers and road standards.

Most CLO respondents were happy or very happy in their relationships with the various project role players. In explaining the nature of these relationships, comments were primarily positive with respect to communications and meetings. A few CLOs indicated that there were negative aspects to some of their relationships with other project role players.

Table 19: CLO relationships with other project role players

Role player	CLO perceptions of relationship
MC	Superficial/empty promises - 2 Corrupt interaction - 1 Good-employer/open communication - 5 Very good - 1
SCs	Fair, needs improvement - 1 Good/open communication - 5 Communication through MC - 1 Bad-dishonest in the payment of workers - 1
PLC	Very Good - 3 There is communication and information - 3 Through Steering Committee, PLC employment is affected, dishonest - 1 Did not play open cards - 1
NRA	Very Good - 3, attends monthly meetings Open communication/good - 2 No relationship/no contact - 2 Good - 1
RM/RE	Good - 8 (meetings, communication and information) Not transparent - 1 Problem-resolution mechanism - 1 Very good - 1

Communities were said to be involved in projects in several ways, often through the PLC structure. These included dispute resolution, when a problem occurred between SMMEs and ABEs; when community members secured employment and in matters relating to safety. In some instances, the community was given tasks such as warning oncoming motorists about the road construction. One CLO said that there were many problems surrounding the project: not everyone could agree on one thing; only a few people got work in a determined area and that there was a "great deal of political interference".

Feedback mechanisms mainly took the form of meetings at which community leaders such as amakhosi, indunas, and ward councillors addressed their communities. Other methods used were the media, letters or telephonic contact, often initiated by the PLCs. The major benefit to communities was seen to be the creation of employment opportunities. Other perceived benefits were tarred roads, new businesses and skills training for local residents. Two CLOs expressed the view that the communities had not benefited from the projects with which they were involved.

Six respondents felt frustrated with the projects, the reasons for this listed in the next table.

Table 20: Reasons for CLO frustrations with NRA projects

Fear in reporting serious incidents
No complaint mechanisms in place
Not getting paid for being on the PLC/ no allowances (3)
The community is not benefiting from the project
No Social Responsibility Programme for community e.g. charity, grants
Cannot meet everyone's needs for work (2)
Projects are not of long term duration
No clear instructions from MC about what the PLC should do

Several suggestions were put forward to improve the role of the CLO. These included that training should be provided in relation to human resources, with reference to the Labour Relations Act, the Employment Equity Act and the Occupational Health and Safety Act.

Table 21: Suggested improvements of CLO role

PLO should be controlled by independent consultant rather than a construction company that is not sensitive enough
PLO should be a critical stakeholder
PLO should report directly to NRA
Explain more about duties of CLO to the community
Training on Human Resources, Labour Relations Act, BEE, occupational health and safety rules
Allowances like transport, cell phones and rate increases for dispute resolution on site
Implement employment laws, Employment Equity Act
Employ a Development Officer

Additional suggestions provided by the CLOs were that SMMEs should have "freedom of expression", implying that this might be suppressed under working conditions. In some instances financial assistance from government was suggested as a means of funding CLO training.

6. CONSULTING ENGINEERS

Consulting engineers (CEs) only nine of the thirty-one projects provided responses to the survey questionnaire. A further six responded to a much shorter pilot questionnaire. This chapter deals with NRA projects from a consulting engineer perspective.

Six of the CEs surveyed have head offices in Gauteng and five in the Western Cape, the rest being spread between the Eastern Cape, Free State and KwaZulu-Natal. Regional offices are located in all nine provinces, the greatest concentrations being in KwaZulu-Natal (18%), Free State and Limpopo (14% each). Only one respondent indicated that a regional office had been opened during 2003, that being in the Eastern Cape.

Table 22: Distribution of head and regional offices of consulting engineers

Province	GT	FS	WC	KZN	NW	MP	LP	NC	EC
Head offices	6	1	5	1	0	0	0	0	2
Regional offices	3	4	3	5	1	3	4	2	3

Company ownership

Amongst the nine Companies that provided ownership details, seven indicated that they were BE and two said that they fell into the "other" category (i.e. only white male or female shareholders). Amongst the seven BE companies, three were fully PDI-owned and four included white male shareholders.

Company Revenue

Company annual revenue amongst the CEs ranged from R2,4-million to R133,5-million, the median being about R15-million per annum during the last three years. Respondents indicated that they currently had between R2-million and R140-million in scheduled contract work for the NRA.

Table 23: Revenue and value of scheduled NRA contracts for CEs

Year	Lowest	Highest	Median	No. of CE companies
2000	R2,4-m	R111,9-m	R14,5-m	7
2001	R3,4-m	R100,1-m	R14,2-m	8
2002	R2,5-m	R133,5-m	R16,15-m	8
Current NRA contracts	R2-m	R140-m	R25,9-m	11

Workforce

Similar variations in workforce size were evident. The number of full-time equivalent (FTE) employees ranged from 11 to 463. As far as contract workers were concerned, the range was from zero to 93.

Table 24: Size of workforce

Employee category	Range	Median	No. CE companies
FTEs	11 to 463	46	8
Contract workers	0 to 93	2	8

An examination of empowerment at the different occupational levels reveals that at top and senior management levels, seven of the nine of the companies that responded had more white male than PDI employees. This proportion was even higher in respect of professional employees, eight companies had more white male than PDI employees. In the case of the "skilled" employee category, the balance was more even, four companies had more white males than PDIs and five more PDIs than white males. Amongst the semi-skilled and unskilled labour categories, where there were such employees, all companies surveyed had more PDI than white male employees. From an overall perspective, the average proportion of white males on the staff of the companies surveyed was 50,1%. This ranged from 29% to 86%, the trend being an inverse proportionality between WM and size of workforce, i.e. the smaller the company, the larger the proportion WM.

Table 25: WM : PDI ratio at different occupational levels in CE companies

	Number of consulting engineering companies			
	WM > PDI	WM = PDI	WM < PDI	Total
Top Management	7	1	1	9
Senior Management	7	0	0	7
Professionally qualified and experienced specialists & mid-management	8	1	0	9
Skilled technical & academically qualified workers, junior management, supervisors, foremen, and superintendents	4	0	5	9
Semi-skilled and discretionary decision-making	0	0	7	7
Unskilled and defined decision making	0	0	4	4
TOTAL permanent workforce	4	0	5	9

(WM= white males; PDI=previously disadvantaged individuals in terms of EE Act)

Four of the nine responding CE companies indicated that they had a published employment equity policy. Asked what challenges they had experienced in implementing employment equity policies, the most common response was that qualified PDI engineers with experience are not available. Two respondents pointed out the difficulty of retaining the services of such persons in the face of competing better prospects.

Skills Development

In order to determine the extent of efforts being made to enhance skills within CE companies, respondents were asked what percentage of their total payroll was spent on employee skills development in the previous financial year. The mean percentage was 2,06% amongst the eight companies that responded to the question. The range was from 0,6% to 4%.

Methodologies utilised to enhance skills were the awarding of bursaries for further studies, in-house training programmes or sponsorship of attendance at relevant accredited courses.

Procurement

Only one of the nine responding companies had a published procurement policy that specifically targeted PDIs.

Current work for the NRA

Four CE respondents said that they had commenced their current contract with the NRA during the course of 2003 and two during 2002. The other three began working on their current NRA project in 2001, 2000 and 1998 respectively.

Only one of the companies did not indicate whether it had worked on NRA contracts previously. The other eight had worked on between one and seventeen previous NRA contracts, the latter being the largest company amongst the respondents. When asked how they had obtained their current NRA contracts, three said by tender, five by appointment to a joint venture consortium and one, by submitting its proposal to the NRA. The nature of the projects included design, supervision and management and in one instance, toll road operations management.

Subcontractors

Six of the nine responding CEs indicated that they had databases of potential SCs. The main criteria for selection of SCs were said to be skills, followed by equity and then rates.

Table 26: Criteria used by consulting engineers when selecting SCs

	Skills	Equity	Rates
%	83%	50%	33%

Six of the nine the CE companies that responded to the relevant question said that they had been or were currently working with SCs. Just over two-fifths (41%) of their SCs were BO companies. A further 18% were BE companies and 41% were "other" companies. Two of the six companies had employed fewer BO or BE SCs than other SCs, one an equal number in both categories and three, more BO and/or BE SCs than others. Where stated, the values of contracts for the SCs varied from as low as R20 000 to a maximum of R1,84-million, both of these extremes having been awarded to BO companies. In all cases, the highest value jobs went to BO or BE companies.

Asked why they had subcontracted parts of the project work, two companies indicated that it was to comply with tender requirements and three, to access specialised skills for the project.

In interrogating MCs' understanding of the tender requirement, responses varied from "to provide a service" to "at least 40% of the work must be awarded to SCs".

In two instances, SC contracts had been prematurely terminated. One gave the reason as a budget cut by the NRA. Nevertheless, trust between CEs and SCs seemed to be high. Three said that there was "strong trust" and two, "trust". In respect of support received from the NRA, all nine CEs said that this had been "excellent". Amongst the six respondents who were asked about their relationship with NRA staff, four said that it was "very satisfactory" and two, "satisfactory".

Respondents indicated that their companies had been working on their current NRA projects for between eleven and sixty-nine months, the median being about fifteen months.

Empowerment Strategies

Where applicable, respondents said that equity expectations in terms of government requirements (i.e. ABEs, SMMEs with high HDI equity) were conveyed openly in meetings or documentation for SCs. In order to ensure adherence to NRA requirements, the most commonly used methodologies were monthly meetings and in-house training. One respondent said "when the work is programmed, it is done so for the ABE SC who is going to execute the work in mind". The intention is to complete projects within the contractual time and budgetary constraints.

Seven out of nine respondents said that the affirmative action procurement policies of the NRA were achievable. Comments in support of this contention were that the NRA's approach had been appropriately structured and that the "targets are reasonable and can be achieved in practice". One of the respondents that said the policies were not achievable said "Joint Venture appointments may achieve their EE targets for procurement, but we are often restricted in implementing our own internal policies due to lack of staff for training".

One respondent recommended that "single appointments" be made on projects because that would facilitate easier achievement of targets. Joint venture arrangements consume time administratively and reduce the time and revenue available to do this effectively. A further suggestion was that "experienced companies could be appointed to check the work of these companies". A further observation was "while we are committed to BE within our company and have already taken considerable steps in the last few years, without sustained income (generating profits), we are unable to continue. That would force us to look for markets elsewhere".

Two of the respondents said that they had partnerships with multinational companies; one indicated that this had no impact on their own BEE targets. The other said that it made it difficult to achieve the required EE percentages.

Only two out of the nine responding CEs said that they were in receipt of tax incentives arising from SETAs.

Project Liaison Committees and Community Liaison Officers

Five CEs reported that there was a Project Liaison Committee (PLC), three that there was not and one did not know. The existing PLCs met monthly or sometimes bi-monthly, in one case.

Seven respondents worked with CLOs. Three of the latter had been selected by the MCs, two by democratic voting, one by the PLC and one by the community. Some suggestions regarding the CLO were that in tribal areas, tribal authorities should be consulted; that a set budget and terms of reference were necessary to operationalise the CLO position; and

that the CLO should not be a community leader, should have a driver's licence and should have a minimum level of education.

Other comments

One of the main challenges identified by a respondent was "being able to succeed in making ABE SCs operate as professional contractors" and to train them "to plan and programme work" and "manage their finances well".

7. ROUTE MANAGERS AND RESIDENT ENGINEERS

A total of fourteen Route Managers or Resident Engineers (RMs/REs) completed questionnaires and this section of the report is based on their responses. Ten of the fourteen (71%) RMs/REs indicated that they had been working on the NRA projects since their commencement. In terms of their involvement, the RMs/REs indicated that they were either permanently on site or visited the projects daily. Written reports varied as per project. Two RMs/REs indicated that they had never written any reports whilst others indicated that they had written as many as 50 reports. In many cases minutes of monthly meetings served as reports.

With the exception of one RM/RE all managers were full-time occupied with the specific NRA project and had no other project commitments. One RM/RE responsible for control and management of equipment indicated that he was involved with nine other projects.

From the questionnaires it was evident that RMs/REs meet with SCs regularly either on a daily basis or every few days. In fewer cases, fortnightly meetings take place and only in selected cases meetings take place less frequently.

Relationship between NRA and MC

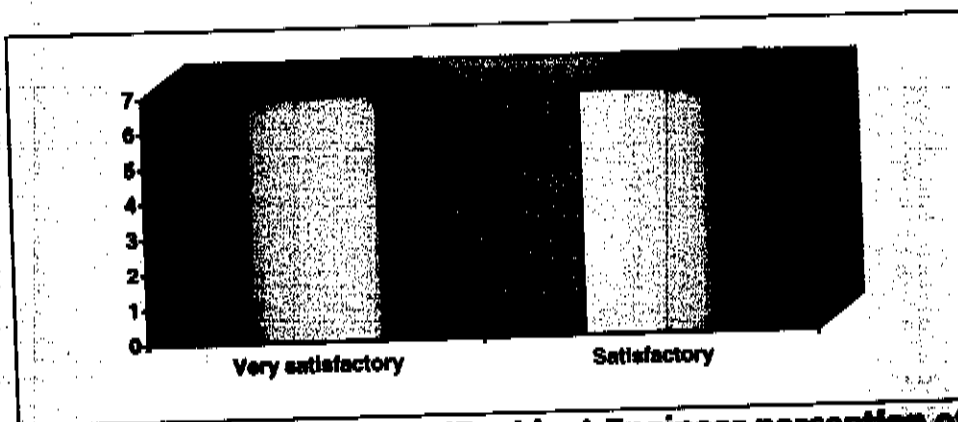


Figure 9: Route manager/Resident Engineer perception of NRA-MC relations

All RMs/REs interviewed indicated that the relationship between the MC and the NRA was either very satisfactory or satisfactory. Responses to the questions were mostly based on the fact that good communication existed between the NRA and the MCs. Meetings were described as friendly, professional and cordial. Mention was also made of the fact that NRA personnel always tried to assist and were mostly sympathetic towards problems that existed. Descriptive words used were "mutual respect", "competency on both the side of the NRA and contractor", "willingness to co-operate" and "requests are handled quickly and efficiently".

Relationship between RM/RE and NRA personnel

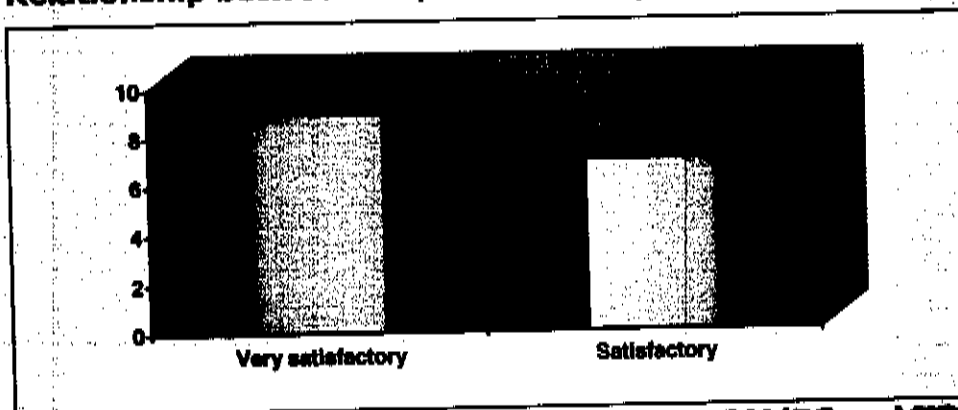


Figure 10: Perceived relationship between RM/RE and NRA

Asked about their relationships with NRA personnel, the overwhelming response was positive. All RMs/REs described relationships with NRA as either satisfactory or very satisfactory. These responses were qualified by statements that the NRA had competent personnel, who were "respected by the industry" and who handled requests quickly and efficiently. Good communication exists between the managers and the NRA personnel and teamwork is evident from the responses.

Project Liaison Committee and Community Liaison Officer

Seven of the fourteen projects (50%) indicated that a PLC had been established and eight of the projects (57%) indicated that a CLO had been appointed. The reason for not having CLOs or PLCs was mainly because the NRA had waived the requirement owing to the nature of the project. One responding RM/RE indicated that a CLO was not needed since the MC had previously worked in the areas and had contacts in the local community to recruit local labour.

Relationship with Community Liaison Officer

The relationships between the RMs/REs and CLOs were mostly described as 'very satisfactory', 'satisfactory' or 'so-so'. These affirmative statements were qualified by indications of competency and good communication skills on the side of the CLO. CLOs helped to resolve many local community concerns and problems. Three of the RMs/REs described their relationship with the CLO as 'so-so'. Two of these responses were qualified by the fact that the RMs/REs had limited contact with the CLOs, interacting with them only once a month at site meetings. They could therefore not give informed opinions. They indicated that MCs and operations managers had more interactions with the CLO. One of the RMs that gave a 'so-so' response qualified this by stating that he had a language problem with the CLO. He stated that the CLO spoke Afrikaans and conducted conversations and meetings in Afrikaans and that he had difficulty in following the conversations.

In the majority of cases, the site management teams attended the PLC meetings. The management team usually consisted of the MC, RM/RE, PLC and CLO. In some cases local community members, business leaders and local tribal authority members also attended. When asked how frequently these community members attended PLC meetings, most

indicated that they attended these meetings monthly or as and when a specific need arose.

The frequency of meetings with CLOs varied. In some projects RMs met with CLOs on a daily basis, other projects indicated that they met every few days whilst others indicated that they met on a monthly basis. Some projects indicated that they met with the CLOs as and when required.

Main challenges

In broad terms, the main challenges mentioned by the RMs/REs were the need for strict management control, strict financial control and ABE requirements. Challenges varied from the generic to the more specific. Generic comments included: "The objective is to complete the project in accordance with the specification on time, within budget and with minimum inconvenience to the travelling public".

Specific challenges mentioned were as follows: "To eliminate the backlog on maintenance"; "poor materials"; "adverse weather conditions"; "remoteness"; "design issues"; "low rates that were inherited"; "unavailability of sufficient road building materials"; "high profit expectations of SMMEs"; "accommodation of high traffic volumes"; "budget control"; "coping with attitudes and frustrations from the community and public"; "coping with the workload and intense demands"; "implementation of high-level technology imported from abroad"; and "measurement and completion of monthly payment certificates".

Two of the RMs/REs mentioned black economic empowerment as a challenge. It was expressed thus: "When the contract period comes to an end, I would like to know that the SMMEs and ABEs currently involved with the contract will be able to tender and do contracts on their own, acting as the MCs. Whatever has been learned during the contract in terms of skills development will be applied successfully". Another respondent said that the challenge was "to get the two provincial teams well trained to become subcontractors".

Dealing with challenges

The way in which these challenges could be successfully dealt with mainly involved high-quality interaction between the various parties, regular meetings and feedback, and good costing structures and formulas. Precise management and strict control mechanisms were mentioned as prerequisites for dealing with the challenges. This related to regular monitoring of workmanship, accurate measurements of quantities, thorough checking of payment certificates and quantity calculations, regular discussions and reviews of progress with the contractor, prompt response and attention to contractors' queries and the need for a full understanding of supplier requirements.

A major challenge mentioned was dealing with the general public. RMs/REs suggested that the public should be more informed about high traffic volumes, re-routing and other problems experienced on the roads. This would result in more tolerant road users, which would simplify some problems experienced by RMs/REs. Temporary signboards and traffic

signs should be available and regularly checked. Traffic police should also be monitored and be readily available to assist.

In terms of SMMEs and BEE, the challenge was to train local SCs to be able to function independently. This included training them thoroughly in cost-benefit analysis. SMMEs should also be assisted to be constantly measuring what profits they were achieving.

Alternate approaches to the project

Five RMs/REs indicated that they would have approached the projects differently. These different approaches mainly involved issues relating to the purchasing of material and issues regarding SMMEs and BEE.

RMs/REs mentioned that they would have investigated materials more thoroughly before going to tender and also suggested that monthly items should be quantified and left to the discretion of the engineer to implement. Two RMs/REs stated that they would have wanted a better understanding of the local people. One RM/RE suggested that ABEs and SMMEs should be invited to all site meetings, thereby enabling them to be part of the whole decision-making process. One RE complained about the workload and the lack of opportunities for young black engineers. He stated that a great challenge was to give young black engineers an opportunity to work alongside older RMs in order to ensure that skills transfers took place.

Compliance with NRA requirements

The most common method employed by the RMs/REs to ensure compliance with NRA requirements was to regulate and monitor the required targeted procurement goals set out in the tender specifications. MCs are obliged to fill in forms detailing with ABE commitments and RMs/REs regulate and control these payment certificates. These commitments are checked regularly on site or at monthly meetings to ensure that the targets are met. In some cases ABE companies sign affidavits as proof to this effect.

One RM/RE indicated that SCs are sent on courses to provide them with the necessary skills to complete their set tasks. In one case the RM/RE indicated that the MC financially assisted an ABE company that had a cash flow problem. In another case the MC monitored the daily expenditure of SMMEs to ensure that they budgeted correctly.

The majority (twelve of the fourteen) RMs/REs interviewed stated that price should constitute 60% or more of the criteria for awarding the tender.

Additional comments

Some additional comments made by the RMs/REs were that in some cases (especially where RRM was involved) the tasks were not mentally challenging and RMs/REs had to patrol the roads to ensure that certain standards were upheld. This often meant dealing with cattle on the road, and angry motorists. The RMs/REs felt in some cases that they needed more challenging tasks, in line with their professional qualifications. In addition, RMs/REs complained that they were often at the receiving end of negative comments about vandalism, damages and accidents. This, according to some RMs/REs, impacted

negatively on their morale. One RM/RE also mentioned that local skills were being developed and very competent SCs trained but these skills were to a certain extent geographically bound and lost if other construction agencies did not come forward and take advantage of them.

In general, thus, RMs/REs painted a fairly optimistic picture of the industry, although this might have been done in the light of the fact that their salaries were effectively paid by the NRA and they did not want to be in disfavour with the client. The main challenge remaining for the RM/RE was to be able to implement strict budgetary guidelines and to successfully implement BEE. Although committed to BEE, this did pose a challenge to RMs/REs who claimed that SCs needed thorough training (especially with regard to budgeting) and needed to be more involved in the decision-making process.

8. CONCLUSIONS

This study has interrogated the current levels of achievement of black-empowerment in the national road projects commissioned by the NRA. From a random selection of projects across the country, the responses of 21 MCs, 104 SCs, 15 CEs, 14 RMs/REs and 9 CLOs painted a picture that is generally positive.

Although the MC companies were usually large and well established in the road construction industry, and in spite of the acute shortage of qualified black civil engineers, almost half had achieved high levels of PDI representation in their top and senior management structures. They reported spending up to ten percent of their payrolls on skills development programmes and indicated that they had sub-contracted work to SMMEs that were about 70% black-owned or empowered in the case of Alterations and Additions projects and almost 90%, in the case of Routine Road Maintenance projects. Most of the MCs were based in Gauteng, indicative of the geographical over-concentration of the industry. The primary issue in need of attention from the MC perspective was the shortage of skilled black professionals in the industry.

The survey of SCs revealed that a high proportion were PDI companies, namely 65% of those working on Alterations and additions projects and 91% of those doing Routine Road Maintenance. As with the MCs, there was an over-concentration of SMME subcontractors in Gauteng, and to some extent in the Western Cape and KwaZulu-Natal. One in ten SCs reported that they were not registered companies.

In spite of these encouraging statistics, many of the SCs used the survey as a forum for the expression of gripes. Primary amongst these was the cash flow situation in their companies, caused by a lack of start-up capital and equipment, pressure from MCs to reduce their prices and delayed payments for work from MCs. An observation that was made by several SCs was that some MCs use fronting methods to win tenders. These included the creation of inoperative SMMEs, using the names of their own employees as directors. Others indicated the difficulty of competing with companies that had established relationships with MCs and many mentioned the need for thorough skills training of their own labourers. Several indicated that they had no written contracts, that they never attended project liaison committee meetings and that the MCs had inadequate understanding of the nature of the SC's work. Other complaints from some were that route managers and resident engineers tended to take the side of the MC in disputes and that SCs had no contact or relationship with the NRA. Better communication and more frequent meetings between all parties were suggested as a means of dealing with these challenges.

Important observations from the few Community Liaison Officers interviewed were that SCs were frequently inadequately qualified or equipped to do justice to the work that they were doing, that comprehensive training programmes should thus be arranged and that the role of CLOs should be higher profile. Consulting Engineers interviewed expressed overall satisfaction with projects and that the equity targets were generally achievable. One important suggestion was that joint ventures should be discouraged so that individual companies spent more resources on BE for themselves. Route Managers and Resident Engineers stressed the need for stricter management and financial controls on projects.

and were concerned about the post-project sustainability of some of the SCs. They also felt that more site and community meetings would facilitate enhanced project execution.

The Preferential Procurement Framework Act (No. 5 of 2000) requires that an organ of state should determine its preferential procurement policy within the framework of specific goals that "may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender or disability" and that "any specific goal for which a point may be awarded, must be clearly specified in the invitation to submit a tender" [para. 2 (1) (d) (i) and (e)]. Within the flexible nature of these provisions, the NRA is presumably thus at liberty to adjust its current goals of 80% of work to be subcontracted by MCs to SMMEs, 90% of which should be PDI-owned or empowered.

In spite of the statistics that have emerged from this sample study, note should be taken of the difficulty that MCs have expressed about finding suitable SCs owing to the severe shortage of PDIs with technical and engineering skills and experience. Conversely, note should be taken of the SCs plea for more skills training. It would thus seem appropriate to adjust the BE targets slightly downwards at this time. The benefits would be that existing PDI-owned companies would be encouraged to consolidate their skills and market reputations. The stresses underlying the perceived or actual need to resort to fronting and the creation of fictitious small companies by the MCs would then be reduced. Simultaneously, the services of suitably qualified non-PDI companies that are currently struggling to win contracts could be harnessed to work on NRA projects. It is thus suggested that the 90% ABE criterion for SMMEs on RRM projects be reduced to 80%.

It is further recommended that financial or other incentives should be increased to facilitate the redirecting of resources to skills training within the roads construction sector. Some attention should also be given to the training of women, who are currently grossly underrepresented in the sector's workforce. Additionally, where feasible, the scope and duration of projects should be designed to be as large and as lengthy as possible, to enhance the growth and development of sustainable SMMEs that would then be able to attract and retain the services of qualified PDI technical and engineering personnel.