



TSIKADZASHE NEMATO graduated from the University of Zimbabwe with a BScEng(Hons) in Civil Engineering in 1992. He obtained the degrees MSc (Project Management) in 1999 and MSc (Real Estate) in 2005, both at the University of Pretoria. In 1996 he accepted a position as lecturer at

Technikon Eastern Cape and subsequently worked for civil and rural consulting engineers before co-founding KNA Consulting Engineers in 1999 and Gem Hedge Properties in 2006. During his career he has been involved in the design and implementation of various municipal infrastructure projects.

Contact details:

T 043-743-7080

F 043-742-0333

knaeastldn@iafrica.com



MARTHINUS MARITZ obtained the degrees BSc (QS) with distinction in 1973, MSc (QS) with distinction in 1987, and PhD (Quantity Surveying) in 2003, all at the University of Pretoria. He is the author or co-author of various technical standard documents for the South African building industry

and has served on several governing bodies, advisory committees and technical committees. He was appointed as full-time lecturer in 1975 by the University of Pretoria and is at present an associate professor in the Department of Construction Economics.

Contact details:

T 012-420-2584

F 012-420-3598

tinus.maritz@up.ac.za

Evaluation of the effect of suretyship on rapid delivery public sector construction projects

T Nemato and M J Maritz

Suretyship is one of the performance risk management measures used in modern construction contracts. Construction contracts, such as the FIDIC, JBCC Series 2000 and GCC 2004, offer pro forma deeds of suretyship and guarantee forms, but consultants sometimes use in-house contract documentation, which may lead to poor interpretation and application.

Suretyship requirements are often the cause of time delays on Rapid Delivery Public Sector Construction Projects (RDPSCP), whether pro forma or in-house deeds or forms are used. Project start dates are generally set within weeks after the contract has been awarded, which time period may be inadequate for some contractors (more specifically emerging contractors) to provide a surety to the approval of the client. In the event of non-performance by the original contractor another contractor must be appointed to complete the works. This process results in loss of time attributable to time frames required for issuing contractual/statutory notices to the original contractor, and delay in appointing a second contractor.

Most general conditions of contract have been designed from a commercial and legal perspective, which ignore the negative practical implications of construction suretyship on progress on site. Consultants, therefore, are compelled by necessity to draft special conditions to suit RDPSCP, otherwise delays and disputes are inevitable.

It is recommended hereafter that, instead of sureties, guarantees be used as securities, which should be in the form of a 'demand guarantee'. No construction time will be lost in calling up this type of construction guarantee (Forsyth & Pretorius 2002: 26) as the guarantor unconditionally and irrevocably undertakes to pay the amount of guarantee on demand and without proof of any breach of contract by the contractor.

INTRODUCTION

Suretyship is often confused with guarantee, according to Hahlo and Kahn (1960). Suretyship is also different from insurance. The main distinctive attribute of suretyship, setting it apart from all other forms of indemnity and intercession, is its being accessory in nature, as set out in the following definition by Forsyth and Pretorius (2002:27):

Suretyship is an accessory contract by which a person (the surety) undertakes to the creditor of another (the principal debtor) primarily that the principal debtor, who remains bound, will perform his obligation to the creditor and secondarily, that as so far as the principal debtor fails to do so, the surety will perform it or, failing that, indemnify the creditor.

Fouche *et al* (2002:264) addresses the *prima facie* requirements of a valid contract of suretyship, including a description of the formation of a contract of suretyship, as follows:

The contract arises from an agreement between the creditor and the surety; the

principal debtor is not involved. The creditor and the surety have to reach consensus on all the terms of the contract. No suretyship will be valid unless it is reduced to writing and signed by the parties thereto. This deed should contain the names of all the parties, the nature and amount of the debt, how the debt is to be paid and when the contract was signed. No terms of suretyship may be orally varied.

The main thrust of the research undertaken by Nemato (2005) for his master's dissertation was to evaluate the effect of suretyship on the duration of RDPSCP in the Eastern Cape Province, South Africa. The research evaluated the need of suretyship on RDPSCP in an industry where there is inadequate knowledge amongst technical consultants and clients' personnel handling construction projects on how suretyship works, and on how to appoint a new contractor to complete the project where the first contractor fails to perform. According to Nemato (2005), projects are delayed as a result of the dilatory processes involved in calling on the

Keywords: suretyship, guarantee, insurance, construction contract, rapid delivery

surety, who in most cases raises defences available to him before paying; the inadequacy of the face amount of current surety bonds to complete construction contracts in the event of contractors failing to fulfil their contractual obligations; and the inadequacy of pro forma deed of suretyship and guarantee forms with regard to essential information necessary to ensure that the surety honours his obligations when called upon.

The research further identified the causes of delay to project execution as, amongst others, the time spent by contractors securing sureties; project managers withholding payment certificates for work successfully implemented until suretyship is provided; sureties exercising their defence; delays on other projects executed by a contractor being excused; wording of deed of suretyship documents being approved by non-legal technical personnel; and inadequacy of the suretyship amount leading to waiting periods for top-up funding to be made available by the client. In view of the findings of this research, industry's technical consultants and clients' representatives need to undergo continuing education in construction security options. The envisaged education is to go hand in hand with the redrafting of the pro forma forms of guarantee available in the marketplace to address the practical and legal implications of security.

The next part of this paper presents an analysis of the amount of time that is lost when suretyship is used as a performance risk management measure and possible alternative mechanisms to avoid dilatory legal processes associated with the calling upon of the surety. The assessment is based on the literature review and questionnaire surveys conducted by Nemato (2005) that outline an overall analysis of these specific research issues and focal points within the framework of the research.

RESEARCH APPROACH

To design a questionnaire that collects data from primary sources, Nemato (2005) carried out an extensive review of literature relating to construction suretyship. The questionnaire was drawn up in a standard format to facilitate data capture and statistical analysis. A five-point Likert scale was used to measure the intensity of feelings or opinions of the respondents (sample elements).

The review process was supplemented throughout by the author's personal observations and experiences, which have spanned more than a decade. The author's experience covered a period when the South African government enacted preferential procurement policies in order to increase participation at prime contract level by emerging construction contractors handicapped by their lack of access to sureties

and working capital loans (CIDB Status Report 2004:26).

The analytical survey method was used in the research design as it collects data in a form that enables it to be quantified (Carn *et al* 1988:337). The facts gathered were easily and comprehensively transformed into a meaningful form through the use of statistics. Data selected were checked for validity and reliability by ensuring that:

- All the data sources were cited (Carn *et al* 1988:10)
- The data reliability was ensured by collecting it over a period of one month. This ensured that the data related to the same conditions
- No assumptions for missing data were entertained since all the data were basically primary

The research population was grouped into five distinct categories, namely sureties (commercial banks, insurance companies and companies specialising in providing sureties), contractors (building and civil contractors), the clients (provincial government departments, district municipalities and local municipalities), technical consultants (engineers), and legal practitioners. The number of elements in each category was limited by the total number in the respective category as it appeared on the data bases of service providers and registration of industry practitioners with their respective associations in the Amathole and O R Tambo district municipalities in the Eastern Cape Province. Greater control of variables was possible since the variables to be researched were identified and the delimitations defined to an extent that no alien variables substantially influenced the research.

A BRIEF OVERVIEW OF THE RELATED LITERATURE ON SURETYSHIP ON CONSTRUCTION PROJECTS

Introduction

A surety, where he is not bound as a co-principal debtor, is entitled to any defence available to the principal debtor (Nagel *et al* 2000b:343). Besides the defences to which the principal debtor would be entitled, a surety has additional advantages such as the benefit of excussion, the benefit of division, and the benefit of cession of actions (Nagel *et al* 2000a:259). It is consequently time-consuming to enforce payment by the surety, and legal costs are inevitably incurred in the process.

The benefit of excussion

According to Forsyth and Pretorius (2002:119), the benefit of excussion (*beneficium ordinis seu excussionis*) is the right of the surety against the creditor to have him proceed first against the principal debtor with a view to obtaining payment from him, if

necessary by attachment of his assets, before turning to the surety for payment of the debt, or of as much of it as remains unpaid.

If the surety is sued first where he has not renounced the benefit of excussion, the surety is only liable for the shortfall after excussion of the assets movable and immovable, corporeal and incorporeal, of the principal debtor. However, properties that are pledged or hypothecated might not be excused before the surety can pay.

If the creditor has excused the principal debtor as far as possible, but without obtaining a settlement, the surety can raise a defence again if the debtor acquires further assets (eg by inheritance), according to Forsyth and Pretorius (2002:124). This means that the time-consuming litigation process has to start all over again.

Forsyth and Pretorius (2002:122) point out that excussing immovables is an expensive process. Legal costs are inevitably incurred in the litigation process, which are additional to the initial project construction budget. This implies that the initial planned project budget will most likely be exceeded. This defence is a dilatory defence. It is, therefore, critical to ensure that deeds of suretyship that differ from the pro forma ones, renounce the benefit of excussion.

The benefit of division

The benefit of division means that the employer will have to sue other co-sureties who are solvent individually for their aliquot shares if the surety has not renounced this benefit. This process is time-consuming and costly. The cost involved in trying to get the surety to pay defeats the objective of public sector project implementation, namely cost effectiveness and rapid implementation of projects. This calls for a closer look into alternative performance risk management measures.

The benefit of cession of actions

The benefit of cession of actions is the right of the surety, who has paid the entire debt to the employer, to recover the amount of the contractor's debt, interest paid to the employer, employer's legal costs in suing the contractor (if claimed), and additional interest on the capitalised debt from the contractor. Irrespective of the surety having renounced the benefit of cession, he is entitled to cession of actions on or after payment, as by normal law.

Immediately on paying the entire debt, the surety can put the contractor *in mora* by demanding payment so that interest commences to accrue. Contractors who are under the impression that suretyship indemnifies them will probably be faced with a larger financial burden than when they endeavour to complete the work in the first place.

The surety's recourse against the contractor affects the contractor's other running

Table 1 The surety has the right of cession, and his recourse against the contractor after paying the client would affect the contractor's other running projects (Nemato 2005:76)

	Total	Graphical presentation					Type of respondent					
		0	100	200	300	400	500	Sureties	Officials	Engineers	Contractors	Lawyers
Total sub-questions answered	337							22	89	77	48	101
Agree	147							12	32	36	29	38
%	43,62 %											
Neutral	112							9	35	22	9	37
%	33,23 %											
Disagree	78							1	22	19	10	26
%	23,15 %											

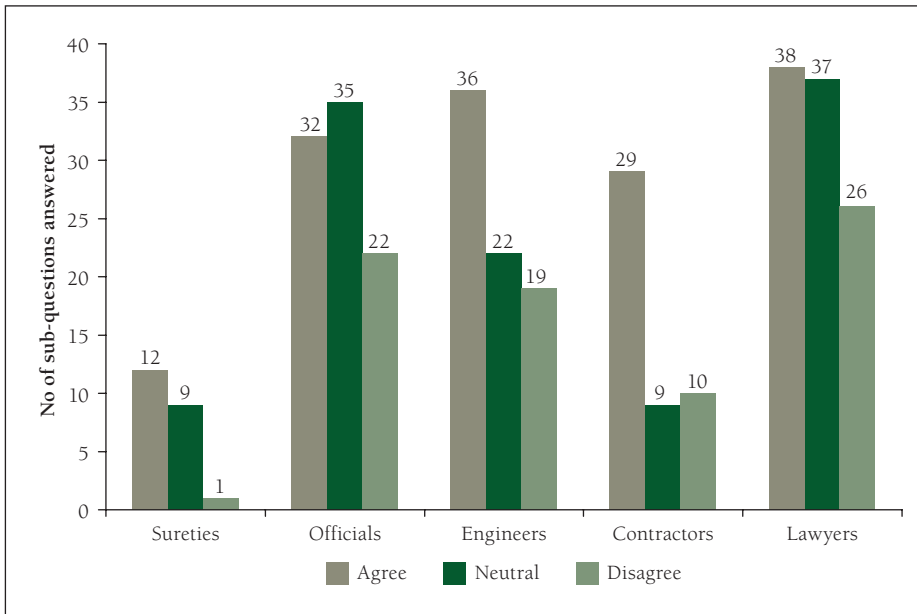


Figure 1 The ripple effect of the contractor's assets being excused affects the contractor's capacity to deliver in time on his other running projects (Nemato 2005:77)

projects. Both table 1 and figure 1 confirm that the surety indeed has a right of cession of actions, which would negatively affect the progress on the contractor's other projects.

Comparison of suretyship and other forms of indemnity

According to Forsyth and Pretorius (2002:32), the difference between guarantee and suretyship can be summarised as follows:

- The guarantor indemnifies the creditor in respect of losses suffered through the debtor's non-performance, while the surety is liable for losses resulting from the debtor's breach of contract
 - If a contract is invalid the guarantor's obligation remains in force and he will have to pay, while the surety's obligation falls away and he will not have to pay a cent
 - The guarantor undertakes to pay on the happening of a certain event but does not promise that the event will not happen, while suretyship is an undertaking in the first instance that the debtor himself will perform and only secondarily that if he fails to perform the surety will do so
- The ICC Uniform Rules for Contract Bonds publication no 524, *Yearbook of the United*

Nations Commission on International Trade Law, vol XXXI (2000:596) defines a bond as ... any bond, guarantee or other instrument in writing issued or executed by the Guarantor in favour of the Beneficiary pursuant to which the Guarantor undertakes on default, either:

- To pay or satisfy any claim or entitlement to payment of damages, compensation or financial relief up to the Bond Amount, or
- To pay or satisfy such claim or entitlement up to the Bond Amount or at the Guarantor's option to perform or execute the Contract or any Contractual Obligation

In either case where the liability of the Guarantor shall be accessory to the liability of the Principal under the Contract, or such Contractual Obligation and such expression shall without limitation include Advance Payment Bonds, Maintenance Bonds, Performance Bonds, Retention Bonds and Tender Bonds.

A performance bond is referred to as a performance security/surety bond in the FIDIC documents. Tender document compilers often amend the FIDIC performance securi-

ty/surety bond to omit any reference to ICC Uniform Rules for Contract Bonds. However, generally defined, a performance bond is viewed as having the same attributes as the performance guarantee in the GCC 2004, except for the following:

- The guarantee has an option to perform or execute the contract or any contractual obligation
- The guarantor's obligation is accessory in nature. This gives it the dilatory attribute of suretyship
- The only protection that the employer (beneficiary) enjoys is an assurance that any judgement or award will be discharged by the guarantor if the principal (contractor) fails to do so. This follows that the guarantor has all the defences, remedies, cross claims, counter claims and other rights or entitlements to relief which the principal may have against the beneficiary in addition to other defences under or arising out of the bond

From the above comparison it is *prima facie* evident that it would be in the best interest of employers to use performance guarantees, and better still, demand guarantees as securities instead of sureties. This is as a result of the subtlety of suretyship arising from it being accessory in nature. This attribute of suretyship often has a dilatory effect on project completion time.

Existing conditions of contract

According to the CIDB South African Construction Industry Status Report (2004:50), the following forms of contract are considered to meet the principles of modern contracts if they are utilised unaltered. These forms of contract are contained in the following documents, as reported in the CIDB Best Practice Guide C2 (2002:2):

- FIDIC (French acronym for International Federation of Consulting Engineers) 1999
- General Conditions of Contract for Construction Works (GCC 2004)
- The Joint Building Contracts Committee (JBCC Series 2000)
- New Engineering Contract (NEC), now referred to as the Engineering and Construction Contract (ECC)

These modern forms of contract are those that appropriately allocate risks, responsi-

Table 2 District and local municipalities do not have legal expertise in-house and deed of suretyship wording is approved by technical personnel (Nemato 2005:80)

	Total	Graphical presentation					Type of respondent					
		0	100	200	300	400	500	Sureties	Officials	Engineers	Contractors	Lawyers
Total sub-questions answered	442							32	102	144	55	109
Agree	256						25	59	95	33	44	
%	57,92 %											
Neutral	108						4	20	33	11	40	
%	24,43 %											
Disagree	78						3	23	16	11	25	
%	17,65 %											

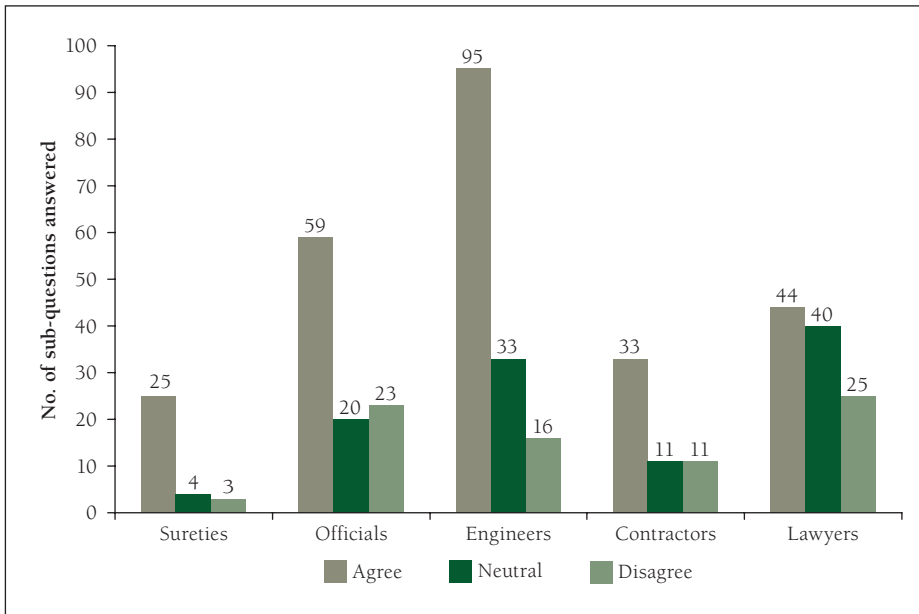


Figure 2 There is inadequate knowledge of legal implications of suretyship amongst technical consultants and clients' personnel approving the deed of suretyship (Nemato 2005:81)

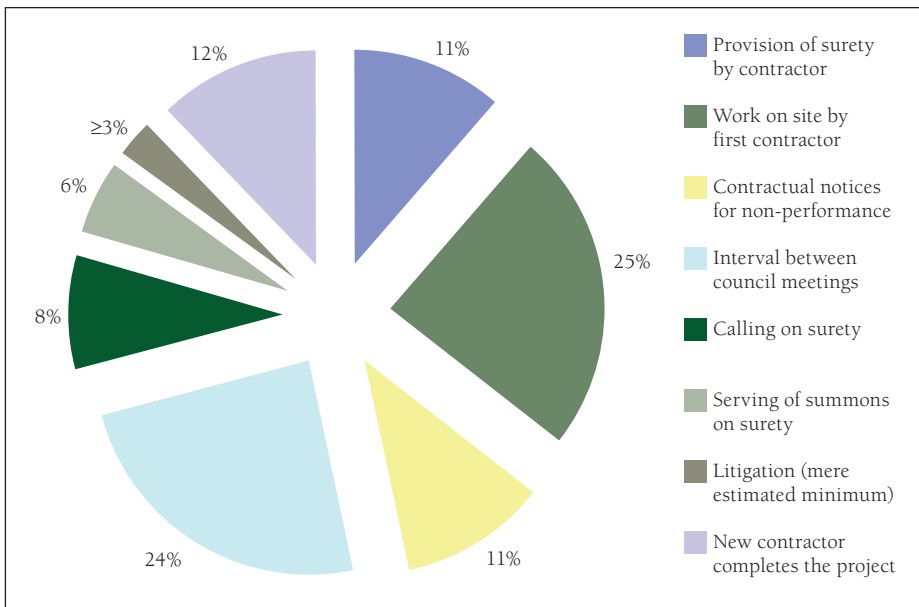


Figure 3 Contribution of each activity related to the use of suretyship on construction projects to the total project duration (Nemato 2005:69)

bilities and obligations, and contain administrative procedures that enable proactive management of the delivery process (CIDB Status Report 2004: 50).

Of these four types of contract only the FIDIC includes suretyship as a performance risk mitigation measure. The GCC 1990

used the Deed of Suretyship, but the GCC 2004 now uses the Form of Guarantee, whilst JBCC uses a construction guarantee that can be either 'variable' or 'fixed'. Although the guarantee is to be in accordance with the provisions of the particular form of guarantee normally included with

the tender documents, the form of guarantee that is finally submitted by the contractor is in many cases different from the pro forma document, hence it becomes subject to approval by the employer.

Nemato (2005), in his master's dissertation, identified that district and local municipalities do not have sufficient legal expertise in-house. Deed of suretyship wording is generally approved by technical personnel. Both figure 2 and table 2 confirm that there is no adequate knowledge of the legal implications of suretyship amongst technical consultants and clients' personnel that handle the approval of deed of suretyship documents. This incapacity may lead to suretyships being challenged in court and ultimate approval of a completely different form of security emanating from the lack of knowledge between a suretyship and a guarantee.

No statistical exercise was carried out by Nemato (2005) to establish what percentage of contracts ultimately uses suretyship as security.

The essentialia (minimum requirements) of a suretyship contract

The surety options provided by the forms of contract are to be checked against the following attributes that define suretyship:

- Forms of security to be stated
 - Agreement between client and surety
 - Explicit terms of the contract
 - Provision for spaces to record the following:
 - Names and addresses of parties
 - Signature of the parties
 - Nature of debt
 - Amount of debt
 - Method of debt payment
 - When the surety has to pay
 - Method of varying terms of the suretyship
 - Date of signing the contract
 - Who should provide the surety
 - Time of submission of surety after tender acceptance
 - When type of suretyship is chosen
 - When the surety is to be released
- The various standard forms of contract discussed were evaluated by Nemato (2005) to determine the minimum time period that will elapse since giving notice to when the surety/guarantee is called upon to pay his

aliquot share of the debt. The research findings by Nemato (2005) indicate that the following periods in weeks (given in brackets) are taken before a surety/guarantee is called upon, when using the following general conditions of contract: GCC 1990 (4), GCC 2004 (8), JBCC Series 2000 (5), FIDIC (13) and ECC (8).

Therefore, for a three-month (12 weeks) contract period the minimum percentage time, when using for instance GCC 1990, that will be lost in calling up the surety is $4/12 \times 100 = 33,3\%$ of the scheduled project contract period since giving notice to when the excussion process begins. Figure 3 shows the percentage contribution of each activity arising as a result of the use of suretyship on a construction project initially scheduled for implementation over a three-month contract period. A reduction in such additional project administrative time will save on construction expenditure in the interest of the South African economy.

Construction risk

There are a host of construction risks according to Smith (1999:41). These risks include financial, legal, political, social, environmental, communications, geographical, geotechnical, construction and technological risks. Risk on construction projects can be reduced and can sometimes be transferred through contracts and insurance, but there will always be some residual risk. The key to success is to analyse and manage risk effectively by arranging to have the risk carried by the party best able to understand and control each risk at the lowest cost. The Institution of Civil Engineers and the Faculty and Institute of Actuaries (2000:33) identify the following four main ways of managing risk:

- Reducing or eliminating: This involves improved design, material specification, better labour relations, training staff to avoid hazards, site security, liaison with local community, in-depth site investigation and advance ordering of key components
- Transfer to a contractor or insurance company: This traditional method should be analysed in terms of the absolute net present value (NPV) of the project cost and not only whether the sign is positive or negative
- Avoid: This involves the use of well-established contractors instead of emerging contractors that may go bankrupt. This approach is counter-productive in that it fails to increase construction industry expenditure and general socio-economic well-being of the previously disadvantaged majority of the South African population
- Absorb or pooled: This involves encouraging joint ventures and removing uncertainty through undertaking of comprehensive feasibility studies

Most physical risk can be insured against. However, insurance cannot deal with uncertainty itself and cannot prevent loss (CIDB Best Practice Guide A5 2004:5). Unexpected risk can result in adversarial relationships, resulting in projects overrunning their scheduled time and budgets. For contracts where contractors are assisted by third-party management support, as reported in SANS 1921-4, the main performance risks are carried by the client, except the liability for non-compliance with statutory obligations relating to construction work.

Nemato (2005), in his master's dissertation, evaluates, among others, the effect of performance risks on project completion times. Clients normally transfer performance risk by requesting contractors to provide performance bonds or sureties. According to SANS 1921-4 the main performance risks to the client are as follows:

- Failure by contractor to adhere to the construction programme and/or late completion of the contract
- Default, or abandonment of the contract by the contractor, or insolvency of the contractor
- Poor workmanship by the contractor resulting in the necessity for repairs and unduly high maintenance, or the presence of latent defects

Clients generally believe that performance risk is managed by requesting contractors to provide sureties in an acceptable form. Emerging contractors are not suited to manage the above stated risks. Performance risks are inevitable if the risks are allocated to emerging contractors. Firstly, emerging contractors generally find it difficult to provide a surety because they do not have collateral. Secondly, they are most likely to fail to complete the work due to lack of management experience resulting in the surety having to be called on. Calling on the surety is a lengthy process, as previously stated, and failure to perform by emerging contractors will lead to projects not being completed within the scheduled times.

Public sector procurement policies in the construction sector

The overarching procurement framework for South Africa is established in the Constitution of South Africa (Act 108 of 1996). The constitution also allows for preferential procurement. This preferential procurement is enabled by the provisions of the Preferential Procurement Policy Framework Act (PPPFA) (Act 5 of 2000), which deals with supply side barriers for entry into the construction industry by emerging contractors.

The PPPFA requires provincial and local levels of government to prepare documented preferential procurement policies. The South African provincial and local government

authorities therefore use the targeted procurement documentation introduced by the Department of Public Works (DPW). This system evaluates, amongst others, price, gender and previously disadvantaged individuals (PDI) equity, but does not address the capacity and suretyship/financial stability of contractors.

CONCLUSIONS AND RECOMMENDATIONS

In order to reduce the delays to project execution as a result of the use of suretyship as a performance risk management measure, and to improve the current status, the following recommendations are suggested by Nemato (2005):

- Use only tried and tested pro forma deed of suretyship/guarantee forms to avoid errors in the use of improper words. The cost of tendering may be reduced since no legal service providers will be required to scrutinise the deed of suretyship. The issue of terms of the deed of suretyship differing from the general conditions of construction contracts can be avoided. When documents and the conduct of the client become inconsistent the surety can be discharged from liability by reason of prejudicial conduct on the part of the client, as was the case in Administrator General South West Africa v Trust Bank of Africa Ltd 1982 (1) SA 635 (SWA).
- Use only personnel qualified and experienced in construction suretyship matters to approve the wording of the deed of suretyship/guarantee form. The study indicated that the status quo is that technical personnel without adequate knowledge of the implications of suretyship are currently approving deeds of suretyship on the majority of projects.
- Investigate the need for alternative ways for the contractor to provide suretyship by way of progressive deduction of a pro rata amount of suretyship from each interim payment certificate. The basis of the argument is the unjust enrichment principle, which requires that the client pay for the work accepted on his behalf by the principal agent. Also, the termination account makes provision for paying the contractor for work done – hence, cancellation of the contract on the basis of a contractor failing to provide surety has been viewed by respondents to this study as a barrier to entry into the market by emerging contractors.
- It is recommended that professional bodies in the built environment, where appropriate, make construction contract law, including issues of suretyship, guarantees, bonds and insurance, an essential module for obtaining continuous professional development points on an annual basis. A module on construction securities should

be added to the National Qualification Framework (NQF) level 2 (learner contractors), NQF level 4 for construction supervisors, and NQF levels 5 and 7 for designers. This is one way of reducing the lack of skills in this field of construction contract law.

- It is recommended that guarantees be used as securities instead of sureties. As has been described in detail, the subtlety of suretyship arises from it being accessory in nature. There are more chances that the surety may not pay than in the case of a guarantor. Suretyship is an undertaking in the first instance that the debtor himself will perform and only secondarily that if he fails to perform the surety will do so. This attribute of suretyship has a dilatory effect on project completion time.
- The GCC 2004 pro forma form of guarantee does not address those issues that are part of the modern contract of suretyship, and which are, for instance, included in the JBCC Series 2000 Construction Guarantee. It is therefore recommended that the form of guarantee be redrafted to, *inter alia*, cover the following aspects:
 - Percentage of contract sum as guarantee. This should not be left for inclusion in the contract data but should be shown in the form of guarantee

- The period within which the surety/guarantor should pay after the employer has instituted a claim

- A copy of the wording of a deed of suretyship should be included in the procurement documentation or agreed at tender stage. If not agreed in advance, the negotiations after appointment may become too protracted.

ACKNOWLEDGEMENTS

The helpful contributions of the role players involved in construction contracts financing, administration and execution in the Eastern Cape province, who participated in the research population by completing the survey questionnaire, are gratefully acknowledged.

REFERENCES

- Carn, N, Rabianski, J, Racster, R and Seldin, M 1988. *Real estate market analysis techniques and applications*. Englewood Cliffs, NJ: Prentice Hall.
- Construction Industry Development Board (CIDB) 2004. Best Practice Guideline A5: Managing Construction Procurement Risks. Pretoria: CIDB.
- Construction Industry Development Board (CIDB) 2004. Best Practice Guideline C2: Choosing an Appropriate Form of Contract for Engineering and Construction Works. Pretoria: CIDB.

- Construction Industry Development Board (CIDB) 2004. *Government Gazette 26427, Notice 63 of June 2004: Construction Procurement Best Practice*. Pretoria: Government Printer.
- Construction Industry Development Board (CIDB) 2004. *SA Construction Industry Status Report*. Pretoria: CIDB.
- Forsyth, C F and Pretorius, J T 2002. *Caney's The Law of Suretyship in South Africa*. 5th ed. Juta.
- Fouche, M A et al 2002. *Legal principles of contracts and negotiable instruments*. 5th ed. Durban: Butterworths LexisNexis.
- Hahlo, H R and Kahn, E 1960. *The Union of South Africa: the development of its laws and constitution*. Cape Town: Juta Law.
- ICC Uniform Rules for Contract Bonds, 2000. *Yearbook of the United Nations Commission on International Trade Law*, XXXI:596–599.
- Nagel, C J et al 2000a. *Business Law*. 2nd ed. Durban: Butterworths LexisNexis.
- Nagel, C J et al 2000b. *Commercial Law*. 2nd ed. Durban: Butterworths LexisNexis.
- Nemato, T 2005. Evaluation of the effect of construction suretyship on duration of rapid delivery public sector projects. Unpublished MSc dissertation, University of Pretoria.
- Smith, J 1999. *Managing risk in construction projects*. Great Britain: Blackwell Science.
- The Institution of Civil Engineers (ICE) and the Faculty and Institute of Actuaries 2000. *Risk analysis and management for projects*. London: Thomas Telford.