

In the large merger between:

Murray & Roberts Limited

and

The Cementation Company (Africa) Limited

Reasons for Decision

Approval

1. On 18 May 2004 the Tribunal unconditionally approved the transaction between the abovementioned merging parties. The reasons for the Tribunal's decision follow.

Background

2. This is a transaction in which Murray and Roberts Limited will acquire control of the Cementation Company (Africa) Limited from Skanska AB, a multinational company based in Sweden. It is intended that Murray and Roberts will acquire Skanska AB's 79,13% controlling interest in Cementation Africa.¹

3. The transaction was notified to the Tribunal on 16 March 2004. A pre-hearing in this matter was held on 24 March 2004. The matter was heard on the 12th and 13th of May 2004.

4. Various witnesses testified at the hearing. The Tribunal subpoenaed three witnesses:

- Mr Les Jagger (General Manager of the Mining Projects Division at Impala Platinum Limited),
- Mr Herman Fourie (Financial Director of Shaft Sinkers) and
- Mr Andre Deventer (Financial Director of Master Drilling).

5. The merging parties called the following witnesses:

- Mr Henry Laas (Managing Director of Murray & Roberts RUC),
- Mr Brian Bruce (Group Chief Executive of Murray & Roberts), and
- Mr Timothy Wakefield (Director of the Cementation Skanska South Africa operations).

¹ Refer to page 3 (para. 2) of the Commission's mergers and acquisitions report.

The Parties

6. The primary acquiring firm is Murray & Roberts Limited (“M&R”), a wholly owned subsidiary of Murray & Roberts Investments Limited, which is in turn controlled by Murray & Roberts Holdings Limited (“M&R Group”). M&R Group is a public company listed on the JSE Securities Exchange South Africa. The shares are widely held with the major institutions including Old Mutual and Liberty as well as the Public Investment Commissioners all holding significant stakes.

7. The primary target firm is the Cementation Company (Africa) Limited (“Cementation”), a firm listed on the JSE Securities Exchange South Africa. 79.13% of Cementation’s issued share capital is held by Skanska Cementation International Holdings Limited (a company incorporated in the United Kingdom), which is in turn controlled by Skanska AB (a Swedish construction, project development and facilities management firm).² Cementation controls three subsidiaries in South Africa as well as other interests elsewhere on the continent.³

8. ***M&R*** is a well-known South African construction company, which focuses on a wide range of construction and industrial manufacturing activities. M&R RUC is the division within M&R that provides mining contracting services and infrastructure development and is the business that is relevant in the context of the proposed transaction. RUC, originally a joint venture between M&R and Gencor, then a prominent South African mining house, has been wholly owned by M&R since 1997. It competes with the target firm, Cementation, in various product markets. RUC operates its business through two divisions, namely raise drilling and mining.

9. The services provided by RUC in the raise drilling division include raise drilling, shaft boring and exploration drilling. In the mining division RUC provides services such as mechanised and conventional horizontal and incline development, mechanised stoping and contract mining, mine and engineering design, shaft sinking and associated infrastructure, cementation and ground stabilisation, drop raising and long hole stoping, feasibility studies and associated construction and specialised support work.⁴

10. ***Cementation*** is regarded as the leading underground mining subcontractor in South Africa. It operates two divisions, namely, drilling and mining. Its drilling division provides services such as surface drilling, underground drilling, raise boring and drop raising *whilst* the mining division focuses on underground construction and mine development, tunnelling and stoping, shaft sinking, and cementation and underground drilling.⁵

Rationale for the Transaction

11. Skanska avers that the businesses in South Africa, Canada and Australia do not form part of its strategic areas of business. For M&R, on the other hand, the

² See page 286 of the record.

³ Its South African subsidiaries are Cementation Mining Skanska (Pty) Ltd, Cementation Emgodini Skanska Ltd, and William Bain & Company (S.A.) (Pty) Ltd.

⁴ Refer to page 44 of the record.

⁵ Ibid page 45 as well as page 5 of the Commission’s mergers and acquisitions report.

transaction is a significant step towards realising its ambition of becoming a pre-eminent player in a number of markets related to mining construction and development, markets which, it is argued, are increasingly global in character. M&R claims that this deal will enhance its ability to tender for major projects in Africa, outside South Africa, as well as in North America (mainly Canada), South and Central America, Australia and Southeast Asia.⁶

Relevant product markets

12. There are two main methods of mining, namely pit mining and underground mining. The merging parties as well as a number of other large players in the broad mining contracting industry are active in underground mining. Open pit mining involves the mining of massive ore bodies characteristic of copper and iron ore. Neither M&R nor Cementation is involved in open pit mining. The skills and capital equipment required in undertaking underground and open-pit contracting activities are quite distinct and it is only the underground mining category that is relevant for purposes of this transaction.⁷

13. In his testimony to the Tribunal, Mr. Laas, the managing director of M&R RUC, identified three broad areas of activity in underground mining, namely, ore body evaluation, infrastructural development and mining of the ore. Before commencing a mining operation, the ore body must be evaluated in order to determine whether the reserve is of a quality and size necessary to sustain a mining operation. Once a viable ore body has been established the necessary infrastructure must be put in place. This infrastructure essentially secures access from the surface to the ore body and enables the ore to be removed from the mine. Once access to the ore body is secured actual mining commences. One or other – or both - of the merging parties is engaged at each stage of the mining process.

14. As already noted, M&R RUC and Cementation group their activities in two broad divisions, namely drilling and mining. In the drilling division one or both of the merging parties are engaged in **raise drilling** and **exploration drilling**. In the mining division one or both of the merging parties are engaged in **toll mining** (“contract mining”), **shaft sinking and mine construction**, **drop raising**, **cementation and underground drilling**, **construction and erection**, and in **mine design, feasibility study and project management**.

15. A more detailed exposition of these activities follows:

15.1 Raise drilling

15.1.1 Raise drilling is a specialised technique for drilling vertical shafts. The purpose of raise drilling is to establish a vertical or an inclined excavation used for ventilation or ore passes. It is done by means of drilling a small hole of approximately 40cm in diameter from the surface to a horizontal shaft within the mine. Once the horizontal shaft is reached a reaming device is attached to the drill string and the reamer is pulled upwards whilst rotating. The rock, which is broken down as a result of the drilling, collects in the horizontal shaft and is then removed via the mine’s existing

⁶ See page 286 to 287 of the record.

⁷ See Mr Henry Laas’ testimony, pages 12 & 13 of the transcript.

infrastructure. The drilling continues until the reamer reaches the surface. Upon completion a vertical shaft has been drilled. Raise drilling does not make use of explosives.

15.1.2 The parties argue that the holes being drilled can be classified into three categories or sizes, these being small, medium to large and very large holes. It appears further that different types of drilling machines are required to drill the different types of holes. The Commission's investigation revealed that machines used to drill small holes could not be used to drill large to medium holes or very large holes. Again, machines used to drill large to medium holes are not strong enough to drill very large holes and inefficient to drill small holes. Nor, it appears, are the customers easily able to substitute different sizes of holes as each hole has different functional requirements, for example, for ventilation purposes or for removing ore.

15.1.3 In light of the above information, the Commission concluded that each of these types of holes drilled by means of raise drilling machines constitute relevant product markets.⁸ Only three players are active in the raise drilling market, namely M&R, Cementation and Master Drilling. It appears that Cementation does not own machines capable of drilling very large holes. M&R and Master Drilling both have the capacity to drill very large holes.

15.2 Exploration drilling

15.2.1 The purpose of exploration drilling is to extract reef drill core for mineralisation assessment by geologists. This is sometimes done from the surface while, in other circumstances, the exploration drilling process commences from existing underground excavations. Cementation and M&R are both active in surface exploration drilling as are other prominent players such as Boart Longyear and Rosond. It appears that a number of smaller companies are also active in this area.⁹

15.2.2 Underground exploration drilling is used for purposes of assessing the quality of the ore body. It is principally used for short to medium term planning for mining purposes. Cementation, although not M&R, is active in underground exploration drilling. There are also other companies active in underground exploration drilling including Rosond, Boart Longyear, Pro-Drilling and other smaller black economic empowerment ("BEE") companies.¹⁰

15.3 Toll mining (also known as "contract mining")

15.3.1 This involves the actual mining, stoping and removal of ore from the mine. This is generally viewed as the core business of the mining companies themselves, although recently outsourcing has even made inroads into this area. The merging parties indicated at the hearing that contracting companies are currently being invited to undertake this work on a project basis.¹¹

15.3.2 It appears that M&R is not active in this market. The existing players in this

⁸ See the Commission's report (page 6) and Mr Laas' testimony (pages 34 to 36 of the transcript).

⁹ Refer to page 48 of the record as well as the Commission's report, page 11, para 5.1.4.

¹⁰ See Mr Laas' testimony, page 18 of the transcript dated 12 May 2004.

¹¹ See Mr Laas' testimony (page 45 of the transcript).

market are Cementation, JIC and BTX (prior to liquidation).¹² We were informed at the hearing that Grinaker LTA is also currently undertaking this kind of work and that Shaft Sinkers has also started a project of this kind.¹³

15.4 Shaft sinking and mine construction

15.4.1 Shaft sinking and mine construction primarily involves the construction of vertical shafts which are utilised for transporting workers and ore to and from the surface. Hence, whenever a new underground mine or a new section of an existing mine is started a vertical shaft must be constructed.¹⁴ The shaft is the main access from surface to levels underground to access the ore body. The shaft could either be vertical or declined. The engineers decide whether a vertical or declined shaft is required to access the ore body.

15.4.2 The minimum diameter for vertical shafts is 4.5 metres and in South Africa these shafts are of the order of 1 500 metres deep. A declined shaft has an average dimension of 4.5 metres to 3.5 metres at a gradient of 8 to 10 degrees. According to the parties, the deep level vertical shaft is primarily for gold and platinum mining and the shallower shafts would be for platinum in the eastern part of South Africa, chrome and coal.

15.4.3 M&R and Cementation are both active in shaft sinking. The other major player – in the South African market, at least – is a company called Shaft Sinkers. There are a number of other South African firms interested – it cannot be put much higher than that at this stage – in this sub-market. There are also international firms actively engaged in shaft sinking, some of which enjoy a presence in the South African market, usually in partnership with a South African firm. Among the better known non-South African firms active in the shaft sinking market are Deilmann Haniel (a German company), the Canadian-based, Redpath, and an Australian company, Brandrill.¹⁵ M&R is also active in this product market outside of South Africa.¹⁶

15.4.4 The parties indicated that mine construction and development work, which refers essentially to the infrastructure required between the shaft and the reef, forms part of the shaft sinking and mine construction product market. It appears that the mining companies undertake much of this work themselves. However, all the major construction companies such as M&R, Cementation, Grinaker LTA, Deilmann Haniel, Concor and other small BEE companies such as Ubuntu-Ubuntu can do this kind of work, and many are already active in this area.¹⁷

15.5 Drop raising

15.5.1 Drop raising is a method used to construct vertical excavations on a much

¹² Note that Brandrill, an Australian shaft sinking firm, acquired a local firm, Torrex, to form BTX which, is now in provisional liquidation after what appears to be a period of very aggressive pricing and imprudent cash flow management.

¹³ Refer to page 46 & 47 of the transcript.

¹⁴ Refer to the Commission's report, page 7 and also page 19 of the transcript.

¹⁵ See footnote 12 above.

¹⁶ Refer to page 21 of the transcript.

¹⁷ Ibid page 33.

smaller scale than is possible through raise drilling. This is used for ore passes and vertical dams for excavations of small diameter with a maximum length of about 50 metres and an average diameter of about 1.5 to 2 metres inside the mine. During this process, holes are drilled over the full length of the required excavation whereafter the holes are charged with explosives from the bottom. The hole is plugged and the explosives are detonated. The blasted rock falls down into the existing mine shaft and is transported out.¹⁸

15.5.2 Firms currently engaged in drop raising include Cementation, JIC, Boart Longyear, Master Drilling and various other smaller players. It appears that M&R is no longer involved in the drop raising market.¹⁹

15.6 Cementation and underground drilling

15.6.1 The parties submitted that the cementation process was the traditional product offering of the target company, Cementation. It involves the pumping of cement into mining cavities and fissures and the lining of underground shafts and tunnels with cement. It is done to limit the ingress of high-pressure water into the mining works. This process also stabilises underground operations and facilitates the development of underground shafts. Indeed, the parties claim that it is this process that made underground mining possible in many of those areas in which South Africa's gold reserves are to be found.²⁰ According to the Commission, the cementation process includes underground drilling and thereafter the pumping of cement.

15.6.2 M&R RUC is not involved in this activity. Firms which provide this service are Cementation, JIC, Rosond, Boart Longyear and other small players. It therefore appears that no overlap exists between M&R and Cementation in this sub-market.

15.7 Construction and erection

15.7.1 It is indicated that this service involves minor construction work, which is not associated with major mining projects. It appears that small civil engineering firms can perform these types of projects.

15.7.2 Both the merging parties as well as Shaft Sinkers, Grinaker LTA, Deilmann Haniel and various other small players are active in this market.

15.8 Mine design, feasibility study and project management

15.8.1 This is a service in which highly skilled personnel are engaged in assessing the feasibility and developing the design of mining projects. Participants in this market include companies such as M&R RUC, Shaft Sinkers, RSV, Hatch and TWP.²¹ Cementation does not offer this service.

Conclusion in respect of relevant product market

¹⁸ For a detailed explanation of these processes, see Mr Laas' testimony (pages 43 to 44 of the transcript) and the Commission's report (page 7).

¹⁹ Supra footnote 16.

²⁰ See page 294 of the record.

²¹ See page 49 of the record as well as page 13 of the Commission's mergers and acquisitions report.

16. We are, in principle, reluctant to adopt the approach - apparently favoured by both the parties and the Commission – that would effectively place each service provided by the merging parties in a separate relevant market. While we are prepared to concede that many of these activities are legitimately designated as distinct sub-markets, we are equally persuaded that each of the more significant players – and this naturally includes both of the merging parties – could, if they so desired, enter each of the sub-markets. Certainly, while, in order to enter a particular sub-market, they may be required to acquire additional machinery or skills, these are easily within their grasp, and the absence of one or other of the major players from a particular sub-market may reflect an implicit market sharing arrangement or simply historical circumstance rather than a meaningful market segmentation. That, for example, M&R is no longer involved in drop raising or that Cementation does not currently possess the range of machinery enabling it to offer every possible raise drilling service, should not necessarily lead to the conclusion that these are separate relevant markets. At very least, each of the merging parties has the potential to enter, with little difficulty or delay, each of these sub-markets. Within this broad market, we will undoubtedly find active participants in certain of the less technologically or financially demanding sub-markets who are unable to engage in the more demanding sub-markets, for example shaft sinking. By the same token we may find that certain of the more sophisticated participants have elected not to participate in some of the lower value markets.

17. Although, then, from the perspective of a competition evaluation, we will focus on the former set of sub-markets – those in which overlaps are significant – this does not alter our conclusion that the **relevant product market is that for the provision of a broad range of mining infrastructure**. Within that broad market, our competition evaluation will focus on the shaft sinking and raise drilling sub-markets. These are sub-markets in which both merging parties are active and from which many of the smaller players engaged in other sub-markets are effectively excluded. There are clearly other sub-markets – for example, mine design or toll mining – from which all but the best resourced and most sophisticated companies are excluded. However these do not appear to be well-developed markets, that is to say, these are markets in which the mining companies remain the dominant players, and so do not loom large in our evaluation of the competitive effects of the transaction.

The relevant geographic market

18. The Commission, the various witnesses who appeared before us, and, indeed, the merging parties themselves all appear to accept that, should the shaft sinking and raise drilling providers active in the South African market attempt to exercise market power, it is not effectively open to their customers, the mines, to procure these services from other players active in other national markets, for example those currently active in Australia or Canada. The parties acknowledged that “generally in the past, foreign mining contracting companies, specialising in raise drilling, shaft sinking and mine development have not been successful *in their own right* in tendering or establishing a mining contract company in South Africa.”²²

²² See page 76 of the transcript and page 26 of the Commission’s mergers and acquisitions report. We emphasise the phrase ‘in their own right’ and will elaborate the significance of this below.

19. Moreover, all those testifying to the inability of international firms to substitute for local players offered the same set of persuasive reasons. They all averred that South African geological conditions and mining practices – notably, although not exclusively, the unusual depths at which mining is undertaken in South Africa - fatally inhibited the ability of firms schooled in other mining environments to offer a substitute service.²³ They argued that South African ‘cultural’ particularities also constrained the ability of foreign players to enter this market, these ‘cultural’ factors ranging from language barriers through to, even more pertinently, the importance of established ‘connections’ between the service providers and those in the employ of the mines responsible for awarding contracts. More tangible inhibitors such as the certification that South African mining regulations demand of those employed on shaft sinking projects and the, partially related, fact that international firms would be obliged to remunerate their key personnel in hard currency whilst earning their contract fees in the volatile local currency were also mentioned. And, at least as important as any of these constraints, all acknowledged that South African mining companies would, partly for many of the reasons outlined here, be extremely reluctant to entrust a massive shaft sinking or raise drilling project to a firm with no established track record in South Africa.

20. For all these reasons we have no hesitation in finding that the geographic markets at issue in this transaction are national. However, we hasten to add that this does not mean that international firms are unable to participate in the national South African markets for the provision of these services. This does not however effect the delimitation of the geographic market although it does have important implications for our assessment of barriers to entry and, hence, of the competition implications of the transaction, and is elaborated below.

The impact of the transaction on competition

21. As already indicated, our competition evaluation will focus on two sub-markets within the broad market for the provision of mining infrastructure, these being shaft sinking and raise drilling. From a competition perspective this transaction appears, at first glance, to raise serious grounds for concern. Consider the bald facts that characterise the two sub-markets:

22. In the shaft sinking sub-market one of the two largest participants, Cementation, is merging with the third largest firm, Murray and Roberts RUC, leaving Shaft Sinkers the only other well-established domestic firm in this sub-market. Although there are other firms – both local and international – that are active in the (national) geographic market, they are, though frequently substantial companies in their own right, still relatively minor players in the relevant markets.

23. In raise drilling, the second of the sub-markets under consideration, the second largest firm, Murray and Roberts RUC, is merging with the third largest firm, Cementation. Master Drillers is the only other active participant left in what becomes a two firm sub-market.

24. It cannot be denied that the transaction will eliminate a significant competitor in

²³ See, amongst others, the Commission’s report (page 9) as well as Mr Fourie’s testimony (page 201 of the transcript).

each of the sub-markets. Although the merging parties point out that Murray and Roberts does not enjoy a significant share of the shaft sinking sub-market and that Cementation is, similarly, a small presence in the raise drilling sub-market, it is clear that both are, at least, significant *potential* competitors in each of these areas – certainly both actively bid for tenders in these sub-markets where they are clearly viewed by the competitors and customers as serious contenders and thus undoubtedly serve to constrain the behaviour of the other two, more successful, players.²⁴

25. Note also that both principal competitors left in each of these sub-markets, Shaft Sinkers and Master Drillers, fear the prospect of the merged entity, backed by the financial strength of the Murray and Roberts group, engaging in predatory pricing, that is, tendering below cost, the better to force their less well endowed competitors out of the market and, thereafter, to exercise market power.²⁵ Evidence from Shaft Sinkers suggested that Cementation's position in the shaft sinking market has been won through exceptionally aggressive pricing which had already depressed margins in the shaft sinking market.²⁶ Shaft Sinkers – and Master Drilling in respect of the raise drilling market – aver that the financial backing of Murray and Roberts would allow this to be taken a step further, beyond the realm of highly competitive pricing into that of anti-competitive predatory pricing. They also fear that the merged entity's capacity to offer, in contrast with their more specialised competitors, a 'one-stop shop' – ranging through mine development, shaft sinking, raise drilling, toll mining – will enhance their position in the market to the ultimate detriment of a competitive market structure.

26. Moreover, we have already determined that the geographic boundaries of both market are national – in other words, local customers, if confronted by an exercise of market power, have a limited ability to turn to providers located elsewhere. Nor, on the face of it, are these national product sub-markets particularly susceptible to new entry. Certainly capital requirements – both financial and human - are significant, and experience or 'track record', including the valued contacts that it brings, is widely acknowledged to weigh heavily in the considerations of those who award tenders.

27. On the face of it then, this transaction fails many of the important tests commonly used to evaluate the competitive impact of mergers – by any measure the transaction increases concentration in two already concentrated markets; it results in the elimination of successful competitors in both markets, including one in which the competitor eliminated has adopted a competition-enhancing aggressive pricing strategy; in reducing the number of competitors from three to two it may enhance the likelihood of co-operation; and barriers to new entry appear to be high. And yet a detailed evaluation of the dynamics of this market reveals factors sufficient to mitigate these concerns.

28. We will turn now to a consideration of those factors that, in our view, mitigate the prima facie concerns outlined above. These may be grouped under two broad headings. The first are what may be termed the general features of a market in

²⁴ In any event, as we point out below, it is, in these markets, difficult to draw the usual inferences from market share data.

²⁵ See pages 467 & 479 of the record as well as pages 202 & 274 of the transcript.

²⁶ See Mr Fourie's testimony (pages 203, 204 & 241 of the transcript).

which the products or services provided comprise a relatively few, but extremely large, 'lumps' of infrastructure. For want of a better term, we will refer to these as 'large project markets'. As will be elaborated below, particular characteristics of these markets make it difficult to draw the usual inferences from market share data. In addition the nature of the customer and the particular role of bidding or tendering in promoting competition in these markets have persuaded us to approve this transaction.

29. Secondly, we will show that the barriers to entry are markedly lower than first impressions suggest.

Large project markets

Market Shares

30. In each of the sub-markets post-merger market shares are, on the face of it, extremely disturbing although there are significant differences between the merging parties and the Commission regarding precise market shares.²⁷ In shaft sinking the Commission calculates that market shares move from a pre-merger 24.2% to a post-merger 59.9%.²⁸ On the other hand, the merging parties' revised figures indicate the market share move from a pre-merger 12.47% to a post-merger 30.85%. In raise drilling (small holes category) the pre- and post-merger market shares, as determined by the Commission, are 39.6% and 79.3% respectively, while the merging parties estimate the pre- and post-merger market shares in raise drilling at 29% and 58.1% respectively.

31. Although market share data are rarely dispositive and must always be complemented by an analysis of entry barriers and other dynamic features of the market in question, they are legitimately and widely used as reliable prima facie indicators of the competitive temperature in a given market.

32. However, in the sub-markets under consideration market share data are to be approached with particular circumspection. This is simply because the markets – substantial though they are – are composed of a small number of extremely large contracts and that an individual firm's victory (or defeat) in a single tender may impact significantly on aggregate market share data. In the shaft sinking sub-market, Shaft Sinkers is currently undertaking some 9 out of 12 active projects, with Cementation responsible for the remainder.²⁹ M&R is, currently, not engaged in a single shaft sinking project. However, were a new entrant to gain a foothold in a market such as this – and the prospect of that happening is examined below – its gain in market share would not accumulate in the incremental fashion associated with most other markets. Were it to win one of the larger tenders it would be immediately propelled into the first league of participants in the market – on present performance it would give it a larger, actual market share than M&R itself. And conversely of course, failure to be awarded a significant contract may result in an immediate and precipitous decline in market share. For example, Shaft Sinkers, which was until relatively recently a division within the Anglo American stable, has a

²⁷ At the hearing, the Commission accepted some of the merging parties' arguments and conceded that the market share figures as portrayed in its recommendation should be appropriately reduced.

²⁸ Refer to page 12 (paragraph 5.16) of the Commission's mergers and acquisitions report.

²⁹ Refer to pages 65, 238 and 239 of the transcript.

particularly significant share of AngloGold and Lonmin's shaft sinking work - indeed the witness from Shaft Sinkers all but presented this as a captive market, work for which his company did not even have to tender. Were this privileged position to be compromised in any way, a major realignment in market shares may result.

33. For these reasons we cannot readily infer low levels of competition from the high levels of concentration apparent in these sub-markets – they are always likely to be high but the identity of the players occupying these heights may nevertheless be unusually susceptible to rapid change.

Countervailing Power

34. Merging parties frequently argue – as they do in the present matter - that the market power that might accrue to them as a result of the merger is blunted by the countervailing strength of their customers. It is not an argument that has always found favour with this Tribunal. We have elsewhere questioned the glib notion that large, well-resourced customers are necessarily better able to resist a monopolistic supplier of an important good or service than are less privileged consumers. Indeed, the customer best able to resist – or, better termed, to *accommodate* – the exercise of market power on the part of a supplier, is precisely one that enjoys market power vis a vis its customers and, hence, is able to pass on an increase in the price of an important input to its own customers. This, as we have pointed out elsewhere, may serve to allay the concerns of the direct customers of the merging parties, but it is cold comfort to the end consumers.³⁰

35. However, the customers of the merging parties in this transaction, for all their undoubted purchasing power and sophistication, are, for the most part, price takers in their own product markets. This is certainly true of the gold producers, and while the platinum producers may be better placed to influence the price of their output, this influence, if it exists, is indirect at most. In other words, the mining companies have little or no ability to pass on cost increases to their customers and so the incentive to resist upward pressure on the cost of their key inputs is considerable.

36. Bear in mind, also, that shaft sinking and raise drilling are important parts of the initial capital investment and are carefully costed by groups of experts in the permanent employ of the mining companies or by consultants retained for this purpose. At the end of a lengthy process, the mining company's board of directors is presented with a project, the viability of which is critically dependent upon the scale of the initial capital outlay. Only after approval has been obtained from the Board do the mining company managers go out to the market in order to procure the capital goods and services that are the necessary precursor to undertaking the business of mining. And they do so within parameters established by their own experts and approved by their Board of Directors – to overshoot on the initial capital outlay is not only to flout a specific board decision but it is also to tamper with the very assumptions that underpinned the decision to undertake the project in the first place. This, we are persuaded, is to be distinguished from the daily purchase of working inputs where it is possible to accept cost overruns occasioned by exercises of market power without thereby threatening the underlying viability of the project.

³⁰ See Competition Tribunal case *Daun / Kolosus*: Case No.: 10/LM/Mar03.

37. We are satisfied, then, that the inability to pass on cost increases coupled with the character of a large capital investment project will powerfully incentivise the mines to resist attempts by the merging parties to exercise market power. We are also persuaded that the mining companies have the ability to act on this incentive.

38. Indeed, the presence, inside most of the established mining houses, of staff effectively responsible for representing the customer in its purchases of technically complex goods and services is, arguably, the most important source of countervailing power – it addresses the massive informational asymmetries that characterise the interplay between, on the one hand, a purveyor of a technically complex product, and, on the other as is frequently the case, an infinitely less knowledgeable customer. Nor is it surprising that the mines should possess this countervailing power, this internal capacity. It manifests the importance attached by the mines to their purchases of capital equipment and services. Whether from a managerial, financial or safety perspective, it is inconceivable that purchasers of capital equipment and services on this scale and of this type would subordinate their decision making capacity to their suppliers. This is, of course, why, until relatively recently, most shaft sinking and raise drilling work was undertaken in-house and why there remains, to this day, an unusually close connection between, on the one hand, the division of the mine responsible for undertaking feasibility studies for new capital investment, and, on the other, the senior personnel of the shaft sinking and drill raising providers.

39. In short, we are persuaded that the mines possess countervailing power not simply by virtue of their size and importance – indeed unlimited financial resources may render them particularly susceptible to powerful suppliers. It is rather their vulnerability to cost overruns on their critical capital investment projects coupled with their inability to pass these on to their own customers that provide a particularly powerful incentive to resist an exercise of market power in the relevant markets under consideration. And this, in turn, compels the mines to retain an internal capacity capable of matching the technical sophistication of their input suppliers.

40. While the right incentives and technically competent staff go a long way towards understanding the countervailing power possessed by the customers of the merging parties, they are not sufficient. The ability on the part of the suppliers to exercise market power is further weakened by the manner in which large capital investment tenders are solicited and awarded. We turn now to a consideration of these factors broadly grouped under the heading ‘bidding markets’.

Bidding Markets

41. The manner in which project specifications are developed and in which tenders are adjudicated limit the ability to exercise market power. We will group these features under the heading ‘bidding markets’ although not all are, strictly speaking, features that belong to bidding markets alone. Nor, we hasten to add, are all bidding markets equally capable of limiting the ability of their participants to exercise market power. There appears to be no particular reason why the existence of bidding markets should prevent an exercise in market power in the market for providing, for example, protective clothing or explosives or some other input that is required by the mines on a regular basis. There may be other reasons why confidential bidding is

preferable in markets in which working equipment is supplied on a relatively small scale and on a regular basis – it may limit corruption, it may provide the appearance of fairness and contestability and, as such, may, from a governance perspective, be preferable particularly where a public entity is the purchaser – but it does not necessarily provide a greater degree of protection from market power. However, we are persuaded that bidding markets do provide a considerable counter to the exercise of market power where the product or service that is the subject of the bidding is a large, lumpy capital investment project.

42. As already intimated, the prospective purchaser of a large capital investment project does not go to market with an approximate idea of the prices and quantities at which he wants to purchase, say, protective clothing, ideas that are usually based on what he paid in the last, usually quite recent, round of purchases of the identical products. Rather the purchaser of a large capital investment project approaches prospective suppliers after an extremely detailed round of technical investigations conducted by its, that is, the purchaser's, own expert employees and consultants and after several rounds before experienced board committees and the board of directors itself. In this process, the detailed requirements of the project – inevitably quite distinct from other shaft sinking or raise drilling projects – are specified. The technical features of the project and the attendant risks are evaluated. Detailed forecasts are undertaken of likely market conditions for the product that is to be mined and, again, the attendant risks are evaluated. Financial models are built and evaluated. The technical, financial and other relevant parameters of the project are specified. Detailed knowledge of the costs entailed in performing the specified project – including labour and material costs – is brought to bear on the decision making process, combined, naturally, with a sophisticated understanding of the impact on costs of a range of imperfectly known factors from interest rate or exchange rate shifts to variable geological conditions. In short the purchaser understands what is required from a technical standpoint, how much he is willing to pay and, within quantifiable limits, what could go wrong. Not all of this knowledge will be revealed to the prospective suppliers but it will be in the possession of the purchaser and the seller will clearly appreciate the extent of the purchaser's knowledge.

43. In short, the client sets, at a high level of detail, the terms of the bid. These parameters are then communicated to a pre-selected group of prospective suppliers. These pre-qualifying bidders are then given access to a data room and to the site of the project. A series of exchanges then takes place between the client and the bidders. The fruits of these various exchanges are communicated to each of the bidders. However, the individual bidders are not given sight of the proposals of their competitors.³¹ The client ultimately conducts a confidential review and selection process. Because the client stipulates the design and the key specifications of the project, specifications which have to be met by all of the bidders, the critical, if not the sole, criterion governing the ultimate selection is price.

³¹ The witness from Shaft Sinkers cast doubt on the actual confidentiality of the bidding process. Certainly he claimed – quite plausibly – that the unsuccessful candidates were, through the grapevine of a small and tightly knit community, made aware of the size of the successful bid. Through this knowledge, he inferred – again quite plausibly – that price was not the only criterion governing a successful bid. He did however acknowledge the overriding importance of price particularly where the price of the mined commodity itself was under price pressure.

44. Although, theoretically, there is nothing to prevent the client from dividing up discreet pieces of the project between various providers, it appears that the norm is to make a single award although it is common for the lead bidder to assemble a consortium of bidders. At times a particular company is invited to join a consortium because it possesses skill in a particular area of the project that is not within the core competence of the lead bidder. Or a consortium partner may lend financial security to the project. Or, and this is elaborated below, a consortium partner may bring the necessary local knowledge and experience that its partners are unable to demonstrate.

45. However, once the award is made, the winner, be it in the form of a single bidder or a single consortium of bidders, takes all. And, unlike an award for the supply of some or other element of working capital, in this case the award will usually account for a not insubstantial share of the successful bidder's total activity going forward. Nor is there any particular reason to expect a second bite at the cherry in the form of another tender offered by the same client – that is, the award may well account for a substantial share of the total market.

46. It is this combination of factors that persuades us that the markets in question are competitive and that, despite the elimination of an important competitor and apparently high levels of concentration, they will continue to exhibit high levels of competition. In summary, because the project is specified to a high level of detail by an unusually sophisticated client, there is little basis for competition other than price. While the competing bidders share knowledge of the technical specifications of the contract, the individual bids and the ultimate award are confidential. And the winner takes all of a project that is likely to loom large in the total amount of work available to each bidding company. A useful analysis (not least, because it was not specifically commissioned for this merger) of bidding markets by Lexecon, a group of consultants, expressed it thus:

“In bidding markets, each bidder will want to submit the highest cash bid that it believes will secure the contract, taking into account other factors such as quality and the likely bids of other bidders. If a bidder bids too high and loses the contract then it has gained nothing.

In these circumstances competition for a given contract does not necessarily increase as the number of firms increases – as long as there are at least two firms capable of making credible bids, competition can be as vigorous with two firms as with three or more. Even if there is only one rival bidder, bidding any price but the lowest results in no sales whatsoever.”³²

47. It is appropriate to add here that these factors have also served to ameliorate concerns around possible post-merger collusion between the merged entity and Shaft Sinkers as well as possible post-merger predation on the part of the merged entity.

48. In any ‘3 to 2’ merger, the prospect of post-merger collusion must loom large.³³

³² See ‘When Two is Enough’ – Lexecon Report – June 1995 www.lexecon.co.uk

³³ While we refer here to the extreme of a ‘3 to 2’ merger, in fact our conclusions regarding potential entry or, more accurately, the role and presence of credible bidders (even if not always active participants) implies that this is not a ‘3 to 2’ in the sense in which this is usually understood.

However, even if we discount the prospect of new entry, we believe that collusion between Shaft Sinkers and the merged entity is an unlikely outcome of this transaction.

49. In a bidding market collusion would take the form of bid rigging. The features of a 'large project' market will constrain this. Firstly, the customers' detailed knowledge of the activities in question will make it extremely difficult to construct a collusive bid that does not invite detection by the customers. Secondly, the opacity of the tendering process atomises the sellers and makes it extremely difficult for colluding sellers to detect cheating on the part of their co-conspirators. And, thirdly, this is a market where the incentive to cheat is enormous – insofar, of course, as the cheat stands to gain a multi-million rand contract that may represent a substantial share of total work available – but where, because of the once-off nature of the product or service sold, the means to punish cheating are all but non-existent.

50. Similar considerations cast doubt on the argument that the transaction will incentivise and better enable the merged entity to engage in predatory pricing. In the wake of this transaction, argue the proponents of the view, there will be two active participants in each of the shaft sinking and the raise drilling market, these being, respectively the merged entity and Shaft Sinkers and Master Drilling. In each sub-market then the merged entity is but one competitor away from achieving a monopoly. This provides a powerful incentive to the merged entity to adopt strategies aimed at excluding its remaining competitor in each of the markets. The financial strength of the Murray and Roberts group will provide the wherewithal to employ predation as the exclusionary strategy. It was, indeed, intimated, although strongly denied, that Cementation's aggressive pricing strategy may already be tantamount to predation.

51. In fact, we consider predation in a large project market to be a particularly risky strategy. The predator must be reasonably confident of its ability to eliminate its competitor through predation. And, then, of course, the predator must be similarly confident that it will, through the exercise of post-predation market power, be in a position to recoup the losses suffered as a result of the predatory scheme. Neither proposition appears credible in the markets under consideration. Simply put, initiating a predatory scheme in a large project market implies a willingness – and the considerable means – to sustain a loss on a contract that may constitute a very significant part of the predator's total share of the market, in fact it may constitute a sizable portion of the total market. And, of course, it may not be sufficient to predate on one contract – it may imply a willingness to sustain a loss on a number of simultaneous and equally large contracts. Moreover, if the scheme is successful and does result in the removal of the competitor from the market, the timing of the payback, of the recoupment, is, at best, uncertain. It may present itself immediately. Or it may take several years to acquire a contract that will enable the predator to recoup the losses sustained during the period of predation. The predator has, accordingly, not only to have confidence in his ability to remove his competitor through predation, he has to be confident that the monopolistic structure created by the predation will still prevail when the opportunity for recoupment presents itself. The predator has, in other words, to take a view on market conditions stretching some considerable time into the future.

52. In our view, then, there is no serious threat of predation in this market. This is, of

course, not to say, that competitive conditions may not result in bidding on very narrow margins, and that this may result in the successful bidder sustaining significant losses on a contract. However, in this eventuality, it is the bidder itself that will (as appears to be the case with BTX) sustain the harm arising from a commercially imprudent strategy, which is not to be confused with the logic of predation.

Barriers to entry

53. We have already noted the existence of apparently high barriers to entry. To recap, it is clear that the financial strength required to enter the sub-markets under consideration and to credibly bid for the massive contracts characteristically at stake, is considerable. So, also, are the skills required. We have also been told that the mines, in awarding tenders, place considerable store in the 'track record' or level of experience of the bidders, in particular, of the teams that will actually undertake the complex tasks that characterise these activities. 'Cultural' barriers and geological specificities constrain the entry of foreign competitors, as do more prosaic, but no less significant, factors like exchange rate volatility.

54. As already elaborated, we are persuaded that the features of a bidding market, particularly one in which the product or service takes the form of a large, lumpy project, ameliorate the anti-competitive significance of high levels of concentration. We would, nevertheless, be hard pressed to approve a three to two merger in circumstances in which we deemed new entry to be an unlikely prospect.

55. The record indicates that the parties themselves do not have a high opinion of their South African-based competitors – except, of course, of Shaft Sinkers in the shaft sinking sub-market and of Master Drilling in the raise drilling sub-market both of whom are rated very highly and who are, arguably, the leading firms in their respective sub-markets. As for the prospect of new international entrants, it appears to be common cause that international companies are unlikely new entrants.

What, then, are we left with?

56. Firstly, we are persuaded that the customers themselves – that is, the mining companies – are, in the face of an exercise of market power on the part of their providers, capable of entering the market themselves. Or, certainly, they are capable of facilitating new entry on the part of alternative suppliers and consortia should this prove necessary.

57. Secondly, while new entry by South African firms or by international firms **acting on their own** or, as the merging parties put it, '**in their own right**', may be discounted, we are persuaded that consortia of international and local firms may prove, and already have proved, to be credible new entrants in these sub-markets.

58. As will be elaborated, our assessment of potential new entry is underpinned by the combined effect of the mining companies' countervailing power, by the features of what we have termed a large project market, and by the characteristics of a bidding market.

59. Let us first examine the prospect of the mines themselves entering – or, rather, *re-entering* – the various sub-markets in which the range of infrastructural products and services are provided. In particular we will examine this prospect in the sub-markets of shaft sinking and raise drilling.

60. It is instructive to recall that each of the three major shaft sinking providers were, until relatively recently, aligned to one or other major mining house. Hence, until a mere two years ago, Shaft Sinkers was part of the Anglo American stable; M&R RUC was, until 1997, part of what is now the BHP Billiton group; and Cementation was, until six years ago, part of the Goldfields group.

61. We are, in fact, persuaded that these relationships, the fact that, in the relatively recent past the South African-based shaft sinking companies were owned or part-owned by one or other of the major purchasers of shaft sinking services, is one important reason for the limited penetration of international firms into the South African shaft sinking market. The witness from Shaft Sinkers boasted of his firm's privileged relationship to Anglogold, suggesting that much of Anglogold work in this area was not even put out for tender, but simply awarded to Shaft Sinkers, their previous associate. It is our view that as these historic relationships work themselves out, as the association between each of the shaft sinking firms and their erstwhile mining house partners becomes more attenuated – and this merger is part of that process – international firms will perceive the South African market as more susceptible to new entry.

62. It appears, moreover, that certain of the mining companies continue to undertake significant shaft sinking work in-house. Hence, while conceding that shaft sinking is highly specialised work which the mines prefer to contract out to specialist providers, the witness from Impala Platinum indicated that his company has constructed 10 (ten) of its 15 (fifteen) shafts itself.³⁴ In general, it appears that the mining companies continue to undertake a significant proportion of the shaft construction and development work in-house with outside contracts only accounting for 28% of the capital expenditure involved.³⁵

63. With respect to raise drilling it appears that the Anglo American group has retained significant capacity to undertake this work in-house. Hence we were told that Anglo American possesses 23 drill raising units. Master Drilling, the leading provider in this sub-market, owns only 25 of these units, only one of which is capable of drilling very large holes.³⁶

64. We have, in our discussion of countervailing power, already commented, at some length, on the in-house technical capacity that each of the mining houses retain in order to prepare the tenders and to evaluate the bids received. We must bear in mind that the companies retain on their books a core permanent staff that, it appears, undertakes work similar to that undertaken by the core capacity retained by the mining companies themselves. That is, they identify the tenders and they engage with their prospective clients, the mining companies, in preparing their responses to the tenders. Once the tenders are awarded, the successful bidder then sets about assembling the team necessary to undertake the actual work. Indeed a witness from

34 See Mr Jagger's testimony on page 85 of the transcript.

35 Refer to page 301 of the record.

36 See Andre van Deventer's testimony, page 284 of the transcript.

one of the mining companies indicated that, along with price and the financial strength of the bidding party, the composition of the team that would undertake the actual work was a critical factor in the evaluation of a bid.³⁷

65. It appears that, in order to assemble an effective team, each company retains a valuable database of prospective employees – including, of course, those who may be in the permanent employ of, or temporarily contracted to, opposition companies. Each witness emphasised that the members of this labour force are well known across the industry and that it is a labour market characterised by its mobility and flexibility. At the highest level of skill, the members of this work force regularly move between companies and regions of the country (and, indeed, the world) as they respond to the demand for their highly valued services. There appears to be no reason why the mines – given the project leadership capacity that they retain in-house – should not avail themselves of this peripatetic labour force should they elect to undertake the projects themselves.

66. This, in our estimation, is the key challenge to the barriers to new entry because even if the mines are reluctant to undertake the actual shaft sinking or raise drilling work themselves, they clearly have the in-house knowledge to specify their requirements, and then, critically, to identify, assemble and supervise the consortia necessary to undertake them.

67. But are alternative consortia available? In other words, should the mines elect not to undertake the projects themselves are there alternative external providers to whom they could turn and who are likely to enter credible bids to undertake work of this nature? We are persuaded that there are and that consortia composed of international and domestic firms are the most likely new entrants.

68. There are clearly credible international companies active in the shaft sinking arena. The Canadian firm, Redpath, has been frequently mentioned, as has Dilemann Haniel, the German firm, and there is the Australian provider, Brandrill. Each of these already enjoy a presence in the South African market and they have invariably achieved this through forming consortia with local firms. There are, on the other hand, local South African firms who are financially sound and who have considerable experience of leading large infrastructural projects – Concor, LTA and Grindrod were mentioned – who could, in co-operation with international shaft sinking firms, enter credible bids. Many of these are companies that have undertaken significant work on the mines although not necessarily in shaft sinking or raise drilling. We should also add that South African firms experienced in the management of large infrastructural projects in combination with international shaft sinking firms would have access to the same mobile labour force on which the mines, the merging parties and Shaft Sinkers currently rely.

69. The mining companies are, through the tendering process, capable of facilitating the formation of consortia. It appears that tenders and the contracts subsequently awarded are often split up on an Engineering, Procurement and Construction Management (“EPCM”) basis where design is done internally or by one firm, materials being procured from other suppliers whilst the contractor effectively provides only a specific construction service.

³⁷ See page 87 of the transcript.

70. We take comfort from evidence of actual entry by these consortia. For example, Mr. Fourie, the witness from Shaft Sinkers, testified that his company had successfully submitted a joint tender with Dielmann Haniel on the important Buffelsfontein Chrome project – this consortium was awarded a R500 million for undertaking the first phase of the project. This would, as argued by the merging parties, presumably have well positioned Shaft Sinkers together with its partner to tender for the second phase.³⁸ It appears that Dielmann has participated in a number of joint projects for the purposes of tendering on certain business, including with M&R.³⁹ The parties also referred us to the entry into the shaft sinking sub-market of Brandrill (an Australian company) which acquired Torrex, a local company⁴⁰, and as a result won significant market shares in this sub-market. In his testimony, Mr Les Jagger indicated that Impala Platinum has invited bids from five potential providers including Shaft Sinkers, Cementation, Murray & Roberts, Grinaker LTA and Dielmann Haniel for a major shaft sinking project planned by the platinum giant. He added that about 8 years ago there was a shaft that was sunk at Beatrix Mine in the Free State by a Brazilian company.⁴¹

71. It also appears that there are projects in which part of the work is undertaken by a contracting company and part by the mining company itself. For example, the shaft sinking project at Boschfontein in Rustenburg was partly undertaken by Anglo Platinum itself.

72. We should add that, in the context of a bidding market of this nature, we must, when assessing credible new entry, be persuaded that there are credible alternative *bidders*, that is, alternative potential providers who, by virtue of entering a bid of their own, are thereby able to restrain an exercise of market power on the part of the merged entity. They do not actually have to win the bid in order to establish their presence in the market. As already noted M&R is not actively undertaking any existing shaft sinking contracts and yet it is clearly and legitimately perceived as a significant actual participant because, regardless of its current lack of success in acquiring contracts, it is perceived to be capable of actually undertaking shaft sinking work. Hence, M&R is a credible bidder. Therefore extant providers of shaft sinking contracts like Shaft Sinkers and Cementation will, in preparing their bids, be restrained by the prospect of M&R submitting a successful competing bid. Similarly, although Cementation enjoy a small share of existing raise drilling contracts, those currently active on a significant scale in this sub-market – namely, Master Drilling and M&R - will, in preparing future bids, look over their proverbial shoulders at Cementation because they are viewed as credible bidders for these contracts. A critical fact in our decision to approve this transaction is our assessment that there are in existence credible *bidders* for both shaft sinking and raise drilling contracts even though certain of these may not have ever participated in a shaft sinking or raise drilling contracts in this country or, indeed, at all. We are, as indicated in our discussion of relevant markets in the province of the provision of mining infrastructure. We are persuaded that there are South African firms experienced in the provision of mining infrastructure and in managing other large engineering or

38 See page 313 of the transcript.

39 See the merging parties' close submissions, page 316 of the transcript.

40 See footnote 12

41 See page 87-88 of the transcript.

construction projects who could team up with an international shaft sinking or raise drilling firm and make a credible bid for a contract in one of those markets. By the same token, there are well resourced, highly regarded international shaft sinking firms who could team up with South African firms possessing local knowledge, connections and experience and, in this combination, could lead a credible bid for a shaft sinking contract.

Conclusion

73. We accordingly find that there is no substantial lessening or prevention of competition in the relevant markets. No public interest issues militate against the approval of this merger. Hence the transaction is approved unconditionally.

David Lewis

28 June 2004
Date

Concurring: Phatudi Maponya and Merle Holden

For the merging parties: Adv. David Untenhalter SC instructed by Robert Legh & Nikki Bush (Bowman Gilfillan Inc.)

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