Emerging Markets Equity Research
14 August 2007

South African Telecoms Market

Cellular Least Cost Routing (CLCR): Consolidation and reinvention the name of the game

- **Assessing the sector:** In this note, we analyse the cellular least cost routing (CLCR) market in South Africa, with our focus being on the size of the CLCR market and major players, recent listings of CLCR players on the ALT^x, the change in the competitive landscape, and the reinvention of business models.

- **CLCR market:** We estimate the size of the market at cR2.5bn per annum at an ARPU of cR1,450. Growth in the market is slowing at between 6% and 8% per annum based on our industry analysis. Given our view that CLCR is approaching maturity, consolidation appears inevitable, and two recent listings on the JSE ALT^x could be viewed as a means of achieving consolidation, in our view.

- **Major players:** Vox Telecom (previously Datapro and with Orion Telecom) and Nashua Mobile (Nashua) account for c67% of the total CLCR market in South Africa at the service-provider level based on our analysis. In the case of Nashua, CLCR accounts for c27% of Nashua's total revenue.

- **Competitive landscape:** It would appear that players in LCR and, more specifically, cellular LCR (CLCR) have to reinvent themselves to stay abreast of not only changes in technology, which is likely to affect current business models and profitability, but also regulatory intervention in potentially lower interconnect tariffs and other alternative service offerings.

- **Reinvention:** Although we don't view CLCR as a "dying" sub-segment of the LCR market, its growth rates have slowed and participants in this market segment will likely need to reinvent themselves. We would like to highlight aspects such as telephone management systems (TMS), telephone audits and branching out into other segments of the voice market, such as VoIP.

Mobile Network Operator revenue

Rm, Year end December Rm, Year end March	2005 2006	2006 2007	YoY %	Market share
Cell C	4,500	5,479	21.8	9.4%
MTN	16,739	20,501	22.5	35.3%
Vodacom	26,916	32,178	19.5	55.3%
Total	48,155	58,158	20.8	100.0%

Note: Cell C and MTN have December year-ends. Our calculations are based on last published FYs.
Source: Company data.

Wireline Services/Incumbents

Johan Snyman[AC]
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

Table 1: South African Telecoms Market, 2006
Rand in billions, unless otherwise stated

Fixed	Amount
Voice – Telkom SA	24.7
Monthly subscriptions	6.3
Local	5.4
DLD	2.7
Fixed-to-mobile	7.6
Interconnect	1.6
International	1.0
Data	
Leased lines etc	7.5
Mobile	
Voice	54.9
Cell C	5.3
MTN	20.5
Vodacom	29.1
Data	
Mainly SMS	4.1

Note: Vodacom and Telkom – FY07 figures (March year-end); MTN and Cell C – FY06 figures (December year-end)
Source: JPMorgan, Company data.

Sector ratings

Altech	N
MTN	OW
Reunert	N
Telkom	N

Source: JPMorgan

See page 15 for analyst certification and important disclosures, including investment banking relationships.

Johan Snyman
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

Introduction

Liberalisation of the South African telecom market since February 2005 has gathered momentum, with VANs and ISPs able to offer voice services as an alternative to Telkom's fixed-line network, not to mention the second network operator, Neotel, which officially launched commercial services late in 2006 after a four-year delay despite Telkom's exclusivity ending in 2002.

Going back to the mid-1990s, the Telecommunications Act opened up certain service licence categories to competition, including VANs and private telecommunications networks (PTNs). The VANs were, however, restricted to the carrying of data. This all changed at the beginning of 2005, and with more than 300 VANs and over 50 licensed PTNs, the market is a minefield when its comes to interconnection and least cost routing (LCR).

To make matters worse, Voice-over-Internet Protocol (VoIP) is being offered as another route for voice calls. Also there are ongoing pressures to reduce interconnection tariffs, if not to introduce asymmetrical interconnect tariffs. It would thus appear that players in LCR and more specifically cellular LCR (CLCR) have to reinvent themselves to stay abreast of not only changes in technology, which is likely to impact current business models and profitability, but also regulatory intervention, such as in lower interconnect tariffs and other alternative service offerings from large telecom providers such as Telkom.

The size of the voice market

We estimate the size of the voice market in South Africa at not more than R85bn as of 2006. It is split c31% fixed-line and c69% mobile. If we assume that Telkom commands a 95% market share in fixed-line voice, the total voice market, based on our analysis, is worth cR81bn. Data revenues (fixed-line and mobile) add up to cR12bn in total.

Table 2: South African Telecoms Market, 2006

Rand in billions, unless otherwise stated

Fixed	Amount
Voice – Telkom SA	24.7
Monthly subscriptions	6.3
Local	5.4
DLD	2.7
Fixed-to-mobile	7.6
Interconnect	1.6
International	1.0
Data	
Leased lines etc	7.5
Mobile	
Voice	54.9
Cell C	5.3
MTN	20.5
Vodacom	29.1
Data	
Mainly SMS	4.1

Note: Note: Vodacom and Telkom – FY07 figures (March year-end); MTN and Cell C – FY06 figures (December year-end).

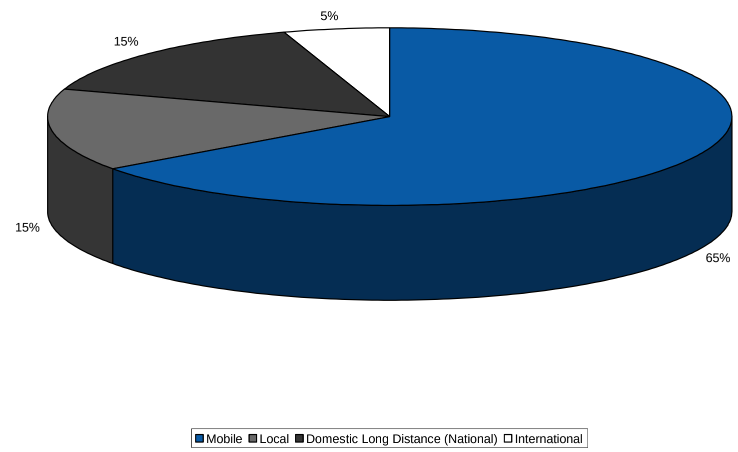
Source: JPMorgan research, Company data.

Johan Snyman
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

According to most industry participants, a typical corporate has the voice traffic profile as shown in Figure 1.

Figure 1: Voice traffic — typical corporate profile

%, unless otherwise stated



Source: JPMorgan research.

It is also interesting to note, according to industry participants, that a corporate's total spend on communications, is split 70% voice and 30% data.

Although alternative telecom operators ("altnets") have been playing in the data market for a long time, the opportunity going forward is to attack the voice market, which for years has been the domain of Telkom. Most of the larger altnets that we interacted with in recent weeks to prepare this note, talked about 10m minutes per month of traffic here, 30m minutes per month of traffic there, which all add up, perhaps not to billions of minutes (yet), but at least 5% of Telkom's total voice traffic, based on our research.

Table 3: Telkom — Voice traffic

Minutes in millions, unless otherwise stated

Year end March	2000	2001	2002	2003	2004	2005	2006	2007	CAGR
Local	19,471	20,388	20,252	20,396	20,547	19,314	18,253	16,655	-2.2%
% change		4.7	-0.7	0.7	0.7	-6.0	-5.5	-8.8	
DLD	5,222	4,938	4,895	4,728	4,616	4,453	4,446	4,250	-2.9%
% change		-5.4	-0.9	-3.4	-2.4	-3.5	-0.2	-4.4	
Fixed-to-mobile	3,659	4,319	4,364	4,135	3,980	3,911	4,064	4,103	1.6%
% change		18.0	1.0	-5.2	-3.7	-1.7	3.9	1.0	
International outgoing	344	357	375	439	452	504	598	596	8.2%
% change		3.8	5.0	17.1	3.0	11.5	18.7	-0.4	
Total	28,696	30,002	29,886	29,698	29,595	28,182	27,361	25,604	-1.6%
% change		4.6	-0.4	-0.6	-0.3	-4.8	-2.9	-6.4	
Interconnect	2,431	2,913	3,061	3,170	3,347	3,524	3,654	3,740	6.3%
% change		19.8	5.1	3.6	5.6	5.3	3.7	2.4	
Total voice traffic	31,127	32,915	32,947	32,868	32,943	31,706	31,015	29,344	-0.8%
% change		5.7	0.1	-0.2	0.2	-3.8	-2.2	-5.4	

Source: Company reports.

Cellular least cost routing (CLCR)

In this note, we discuss CLCR, an interesting segment of the voice market, which through the years has emerged as a sizeable market, which we estimate at cR2.5bn, at an average ARPU of R1,450. At R1.25 per minute, which is the current mobile interconnect rate (peak traffic), we estimate CLCR traffic at c2,000m minutes, or c50% of Telkom's fixed-to-mobile traffic. All added together, it represents c6,100m minutes of "potential" fixed-to-mobile traffic per annum, or c20% of Telkom's total voice minutes.

Table 4: Interconnect — the numbers

Rand per minute, unless otherwise stated

Traffic	Comment	Tariff Peak	Tariff Off-peak	Mar-07 Tariff JPM estimate	Mar-07 Traffic (m min) Total	Mar-07 Interconnect revenue (Rm)
Mobile-to-fixed	Paid by MNOs to Telkom	0.27	0.16	0.34	2,419	815
Fixed-to-mobile	Received by MNOs from Telkom	1.25	0.77	1.32	4,103	5,435
Mobile-to-mobile	Paid by MNOs to MNOs for off-net traffic	1.25	0.77	0.89	22,377	9,195

Source: JPMorgan estimates, Company data.

Table 5: Fixed-to-Mobile traffic and revenue

Rand in millions, unless otherwise stated

Year end March	2000	2001	2002	2003	2004	2005	2006	2007	CAGR
Fixed-to-mobile revenue - Telkom SA	5,325	6,845	7,323	7,539	7,321	7,302	7,647	7,646	5.3%
Fixed-to-mobile traffic (m minutes)	3,659	4,319	4,364	4,135	3,980	3,911	4,064	4,103	1.6%
Revenue per minute (Rand)	1.46	1.58	1.68	1.82	1.84	1.87	1.88	1.86	3.6%

Source: Company reports.

Vox Telecom (previously Datapro and with Orion Telecom) and Nashua Mobile (Nashua) account for c67% of the total CLCR market in South Africa at the service provider level, based on our analysis. In the case of Nashua, CLCR accounts for c27% of Nashua's total revenue. At a level below the service providers, we have identified a handful of so-called super dealers and dealers, of which two - TeleMasters and TelePassport (through the Huge Group) - are listed.

The CLCR industry in South Africa

What is LCR and what is CLCR?

LCR is simply speaking the process of identification and implementation of the most cost-effective way to reduce telephone (voice) call charges. These calls, including all types of traffic, are routed along the path of least cost. Obviously, LCR is only possible when there is access to more than one route.

The advent of GSM in 1994 and liberalisation of the South African telecom market since February 2005 with VANs and ISPs able to offer voice services now provides an alternative to Telkom's fixed-line network. In the meantime, the second network operator (SNO) — Neotel — was licensed as well. These events are likely to result in a significant increase in telecoms routing alternatives and represent significant growth opportunities for telecom service providers and managed services players.

Although price in the past has been the number one factor to determine the best route, 1) quality of network or route and 2) level of customer service, are gaining in popularity in which routes are the best.

Cellular least-cost-routing (CLCR)

As a derivative of LCR, it is the routing of calls from fixed-line to cellular via like-networks, ensuring that the voice call are made "on-the-network" or commonly referred to as on-net, being much cheaper than "off-the-net" or commonly referred to as off-net. In general, an off-net call is a voice call originating from one telecom network (let's say Telkom's fixed-line) that "break-out" onto another network (let's say Cell C's GSM network). Given the "break-out" for off-net calls, it is no surprise that such calls are more expensive than on-net calls, given the interconnection rate (or what we term interconnect) that is payable for termination of calls by the originating network to the terminating network.

According to Telkom's new tariff filing with ICASA (effective 1 August 2007), the tariffs of outgoing calls to cellular services are unchanged (the last tariff increase was 1 January 2005).

Table 6: Telkom tariffs — fixed-line to mobile

Rand per minute, unless otherwise stated

Fixed-to-mobile	Before Jan 2002	% change	Jan 2002	% change	Jan 2003	% change	Jan 2004	% change	Jan 2005 and after
Total tariff (including VAT)	1.60	11.3	1.78	5.6	1.88	-2.1	1.84	2.7	1.89
VAT	0.20	11.2	0.22	5.6	0.23	-2.1	0.23	2.7	0.23
Total tariff	1.40	11.3	1.56	5.6	1.65	-2.1	1.61	2.7	1.66
Retained by Telkom	0.21	57.1	0.33	12.1	0.37	4.3	0.39	6.2	0.41
Retained by mobile operator	1.19	3.2	1.23	3.9	1.28	-4.0	1.23	1.6	1.25
Mobile retained as % of total	85%	-7.3	79%	-1.7	78%	-1.9	76%	-1.1	75%
Mobile-to-fixed	**Before Jan 2002**	**% change**	**Jan 2002**	**% change**	**Jan 2003**	**% change**	**Jan 2004**	**% change**	**Jan 2005 and after**
Termination rate paid to Telkom	0.10	110.0	0.21	14.3	0.24	4.2	0.25	8.0	0.27

Note: All tariffs exclude VAT except if indicated otherwise. All figures are based on peak rates.

Source: Company reports.

The concept of CLCR should be evident from Table 6. At R1.66 per minute (peak rate and excluding VAT), the routing of a call to mobile-to-mobile (MtM) or on-net reduces the tariff to R1.25 per minute or a saving of R0.41 per minute, which would be the portion of the tariff or call charge retained by Telkom. In simplistic terms, it represents a saving to the corporate of c25%.

The equipment that makes CLCR works

In practice, a customer will receive cellular equipment with SIM cards from each of the three mobile network operators (MNOs) mounted on his PABX system, and then programmed to route FtM calls to mobile destinations. Such equipment to route the FtM calls is called a cellular "router" ("Premicell" was the Nokia name of their first offering"), and connected to the PABX telephone system. When a voice call is made from a company's telephone extension with a mobile prefix, the "router" routes the call past the Telkom network. The router does have a single SIM-card installed for one of the different mobile networks. Generally Cell C is only directed to Cell C numbers, MTN to MTN. Vodacom supplies the only package (Talk 500s) that can effectively be used to call on all 3 networks, although their Corporate 500s is the cheapest to call onto its own network.

Size of the CLCR market and key players

A good starting point is the structure of the CLCR market. At the top of the pyramid, are the three MNOs – Cell C, MTN and Vodacom. EBITDA margins are typically around 35% with the exception of Cell C, a late starter in the game and currently with an EBITDA margin of 7.0% (FY06).

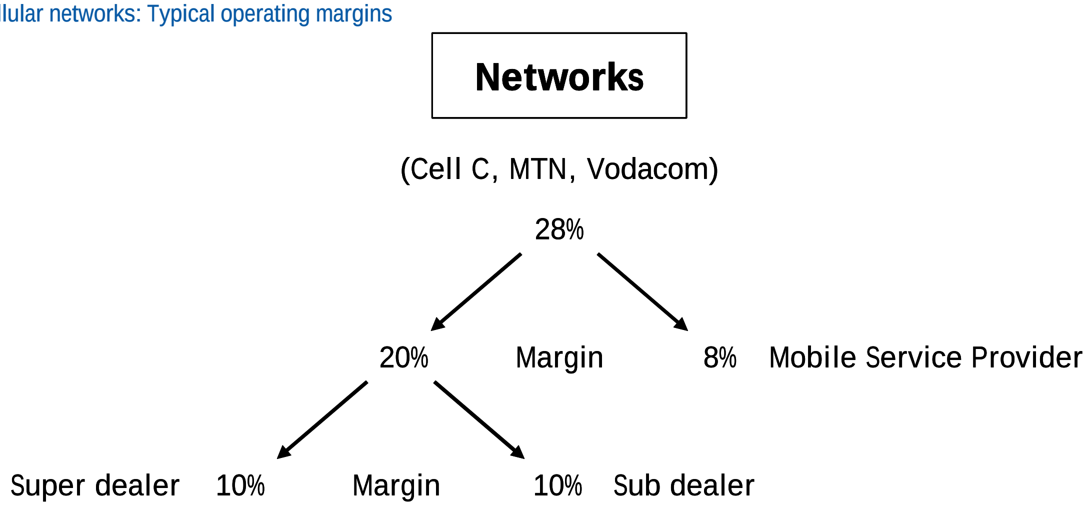
Table 7: Structure of the CLCR industry

Level	Number of players	EBITDA margin
Mobile network operator (MNO)	3	c35%
Service Providers (SP)	10	c10%
Super Dealers	Tens	c10%
Dealers	Hundreds	c8%

Source: JPMorgan research.

Down from the MSP level we have another two levels in the value chain, being super dealers and then sub-dealers. Typical operating margins at the three levels are shown in Figure 2. Please note the network operating margin refer to the wholesale margin.

Figure 2: Cellular networks: Typical operating margins



Source: JPMorgan research.

Johan Snyman
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

The services or airtime-related revenue of the three MNOs combined is R58.2bn. Last year, the YoY growth was 20.8%, with Vodacom the leading MNO at a market share of 55.3%, based on our analysis.

Table 8: MNO — revenue

Rand in millions, unless otherwise stated

Year end December	2005	2006		
Year end March	2006	2007	YoY %	Market share
Cell C	4,500	5,479	21.8	9.4%
MTN	16,739	20,501	22.5	35.3%
Vodacom	26,916	32,178	19.5	55.3%
Total	48,155	58,158	20.8	100.0%

Note: Cell C and MTN have December year-ends. Our calculations are based on last published FYs.

Source: Company data.

There are 10 mobile service providers (MSPs) in South Africa. Of the 10 MSPs, only two are truly independent, having service provider agreements (SPAs) with all three MNOs — Autopage Cellular (Autopage) and Nashua Mobile (Nashua).

Table 9: Mobile Service Providers (MSPs)

Company	Cell C	MTN	Vodacom
Autopage Cellular	x	x	x
Cell C SP	x		
Global Telematics			x
i-Talk		x	
MTN SP		x	
Nashua Mobile	x	x	x
Orion Cellular		x	
Smartcom			x
Virgin Mobile	x		
Vodacom SP			x

Note: Smartcom was recently purchased and incorporated into Vodacom

Source: JPMorgan estimates.

The market size of the mobile service providers (MSPs) is relatively easy to calculate, if we assume a wholesale margin of c28%. Thus, at a wholesale margin of 28%, we calculate a market size of R16.3bn. Given that MSPs are mainly focused on the postpaid subscriber base, we are able to calculate the market shares, based on subscriber data from most of the larger MSPs.

Table 10: Market share - MSPs

'000, unless otherwise stated

MNO / MSP	Subscriber base – Dec06	Market share	Control of own postpaid
Cell C SP	1,004	16.6%	93%
MTN SP	1,343	22.2%	63%
Vodacom SP	2,214	36.5%	78%
Autopage Cellular	622	10.3%	100%
Nashua Mobile	577	9.5%	100%
Other	300	5.0%	100%
Total	6,060	100.0%	

Note: Autopage and Nashua figures at end of February 2007 (FY07) and September 2006 (FY06) respectively.

Source: JPMorgan estimates, Company data.

We would like to highlight two points:

- The figures of Cell C include "ControlChat", its hybrid product. At the end of December 2006, ControlChat subscribers accounted for 39.4% (423.6k) of Cell

C's total postpaid subscriber base. It increased to 41.7% and 43.4% at the end of 1Q07 and 2Q07, respectively.

- Although Vodacom does not separately disclose the postpaid split between excluding and including hybrid products, MTN disclosed that at the end of FY06 (Q406) it had 582k (YoY growth of 107.1%) MyChoice TopUp and 806k (YoY growth of 5.9%) MyCall 100 subscribers. On a combined basis, it accounted for 65.1% (1.39m out of 2.13m) of MTN's total postpaid subscriber base.

Now onto the MSPs that support CLCR. We have identified four MSPs that operate in the CLCR market:

- Vox Telecoms. Previously known as Datapro, it is the largest MSP in CLCR, with a market share we estimate at c37%. With effect from 1 December 2006, Vox Telecoms acquired Orion for R380m. For the year ended 28 February 2006, Orion reported revenue of cR700m, operating profit of cR66m (operating margin of 9.5%) and net income of cR46m. Orion has a SP agreement with MTN, and dealer agreements in respect of Cell C, Transtel and Vodacom.
- Nashua Mobile. One of two independent MSPs, Nashua Mobile has since its formation in the late 90s focused on the corporate market. At the end of FY06 (September year-end), Nashua Mobile had a postpaid subscriber base of 577k. We estimate it has 45k CLCR lines in the market accounting for c30% of the total CLCR market, generating revenue of cR780m in FY06. CLCR revenue, based on our estimates, represents c27% of total Nashua revenue.
- Autopage Cellular. The other independent MSP, Autopage is the largest money-spinner of parent company Altech. We estimate its number of CLCR lines at 25k, or c17% of the total market. At the end of FY07 (February year-end), Autopage reported revenue of R4.07bn, of which c11% is derived from CLCR.
- Global Telematics. Part of the Thales Group, the SP agreement with Vodacom appears to extend to GloCell, a partnership between Investec and GloMail. We estimate that GloCell has about 25k CLCR lines in the market, and similar in sixe to Autopage, but exclusive to Vodacom rather than independent such as Autopage. (Glocell supplies most, if not all, Orion Vodacom CLCR lines, so one should be aware of double counting Orion lines).

Table 11: CLCR players

Company	Number of lines	% market share
Vox (Orion)	55,000	36.7
Nashua Mobile	45,000	30.0
Autopage Cellular	25,000	16.7
Global Telematics (GloCell)	25,000	16.7
Total	150,000	100.0

Source: JPMorgan research.

According to industry participants, the CLCR market is growing at between 6% and 8% per annum. As an example, Nashua reported in FY04 that it had a base of 31.7k lines, and that FY05 has seen a slowing of CLCR. We calculate that Nashua, between FY04 and FY07E, achieved a CAGR of 5.4%, at the low-end of CLCR market growth.

We estimate the size of the CLCR market at cR2.5bn, at an average ARPU of R1,450. According to industry participants, ARPUs have remained more or less unchanged for the last year or so. Our estimate of the market size appears more

Johan Snyman
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

conservative than some industry participants, due mainly to what we believe is an element of double-counting. If most industry participants are in agreement with our sizing of the market in terms of lines (which they are), and if the average ARPU is cR1,450, then the market size is less than R3bn!

The next step in our analysis was to identify the major super dealers and dealers in CLCR. In Table 12 we highlight a couple of super dealers and dealers we have identified, together with the respective size of business in terms of number of CLCR lines and revenue. It is important in this analysis to distinguish between the wholesale and retail segments of the market: as an example, in the case of Nashua, c40% of business is wholesale and c60% is retail. What we therefore reflect in Table 12 is the retail element of Nashua’s business, also the case for Autopage with c43% retail.

To better understand the Super dealer / dealer level of the market, TeleMasters’ business is through Autopage as the MSP, and the company accounts for about one-third of Autopage's total number of CLCR lines. A similar scenario is with Intelegence Telecom, which accounts for a similar percentage of Autopage’s total CLCR base. A company such as Du Pont Telecom would be using more than just one MSP.

Table 12: The CLCR market - Super Dealers and Dealers

Rand in millions, unless otherwise stated

Company	Number of customers	Number of lines	Annual revenue
TelePassport (The Huge Group)	5,000	15,000	261
TeleMasters	3,000	7,200	125
Storm Telecoms		12,000	209
Centracell		10,000	174
Intelegence Telecom		7,000	122
Du Pont		5,000	87
Vox Telecoms (Orion)	2,800	46,750	814
Nashua Mobile		27,000	470
Autopage		10,800	188
Other		9,250	161
Total		150,000	

Source: JPMorgan research.

Corporate activity and new listings

We have seen in recent months a high level of activity in the CLCR market, perhaps not that different to other segments of the telecoms industry in South Africa, which appears to be fast-moving with a lot of activity, both corporate and operational.

Early in 2007, Vox Telecom (then Datapro) announced the acquisition of Orion. The transaction was effective 1 December 2006. The acquisition materially improved the scale and strategic position of Vox Telecom and exposed the company to CLCR on a significant scale. The acquisition increased the monthly annuity revenue base of Vox Telecom by cR60m to cR84m.

TeleMasters listed on the ALT^{x} in March 2007. The company employs 31 people and is headquartered in Pretoria. The company has grown to 3,000 clients with c7,200 CLCR lines in the market. It serves both large and SMME businesses, and amongst its clients are Eskom, the Auditor-General, several Government departments, Armscor, Softline and AngloGold-Ashanti.

The services of TeleMasters are distributed through c105 active dealers with ownership of the clients vesting with the company. The company has a high ratio of revenue per employee, largely made possible through its unique business model, which incorporates an extensive reporting system.

In FY06 (September year-end), TeleMasters reported total revenue of R124.5m, gross profit of R18.1m, operating profit of R12.2m (implies an operating margin of 9.8%) and headline EPS of 17.3c, based on 42.0m shares in issue (after the ALT[x] listing).

The most recent listing was the Huge Group. It listed on August 8, 2007, also on the Alt[x]. The trading name of the business is TelePassport. According to the company, it is the longest established LCR provider in South Africa. The company has a national footprint and an associated business in Namibia. TelePassport currently employs 130 people.

The company performs its own in-house research and development (R&D), and offers the marketplace a few products, such as 1) the Genie Box, which controls all routing decisions typically performed by a PABX; 2) texSMS Outlook SMS service, generating SMS messages from Microsoft Outlook in exactly the same way as regular e-mails; 3) MNPP, a managed LCR service incorporating MNP; and 4) TMT, a managed telecom service of client telephone infrastructure.

In FY07 (February year-end), TelePassport reported total revenue of R280.0m, gross profit of R54.4m, operating profit of R14.5m (implies an operating margin of 5.2%) and headline EPS of 13.6c, based on 99.6m shares in issue (after the TelePassport restructuring and the private placing at the time of the Huge Group listing).

Table 13: Financial information - TeleMasters and Huge Group

Rand in millions, unless otherwise stated

	TeleMasters		Huge Group	
Year end September	2006	2007E		
Year end February			2007	2008E
Number of CLCR lines	7,200	7,800	15,000	16,200
Number of employees	31	31	130	130
Revenue	124.5	129.8	280.0	297.7
Cost of sales	106.4	111.1	225.6	239.2
Gross profit	18.1	18.7	54.4	58.5
Gross margin (%)	14.5	14.4	19.4	19.7
Operating profit	12.2	11.1	14.5	19.2
Operating margin (%)	9.8	8.6	5.2	6.4
Headline earnings	8.7	7.258	13.6	16.4
Number of shares in issue (m)	42.000	42.000	99.647	99.647
Headline EPS (c)	20.71	17.28	13.65	16.46
Current share price (c)	247	247	310	310
P/E (x)	11.9	14.3	22.7	18.8
Revenue per employee	4.0	4.2	2.2	2.3
Revenue per CLCR line (R'000)	17.3	16.6	18.7	18.4

Note: Based on published interim and Q307 results, TeleMasters is 37% ahead of PAT forecast as per IPO document.

Source: I-Net, Company data.

Johan Snyman
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

Key developments in the CLCR market

We would like to highlight a few key points from our analysis:

- The CLCR market growth is slowing, and therefore, we do not see the recent listings and other corporate activity aimed to achieve consolidation as a surprise. However, not all industry participants share this view. According to the pre-listing statement of TeleMasters, "… prospects of LCR in the future are excellent. LCR has been hailed as 'the most strategic emerging technology' per a BMI Technowlogy knowledge survey Apr 2006 … .". Also "the company estimates that the growth in the market is for at least another 200,000 units and that the entire industry has only installed half of that in the past 10 years". We believe it is important to distinguish between LCR in general and CLCR as a subset of LCR. It is our view that while CLCR is growing, it is not at double-digits rates as compared with other forms of LCR, such as VoIP.
- Corporate incentive bonuses (or CIBs as commonly known in the industry) appear too high compared with the actual cost of the hardware unit or "routers" themselves. These units are available at cR1,600 each compared with CIBs of cR3,000. In the case of MTN, three-year contracts have to be entered into as oppose to two years in the case of Vodacom and Cell C.
- Because of the lucrative level of CIBs, double SIMing is on the increase. This phenomenon takes place when some industry participants install more than one SIM card in a special or adapted premi-cell and then claims the double CIB from the network.
- According to industry participants, Vodacom's national market share in CLCR is c65%. We are not surprised, given our view of Vodacom's dominance at the high-end of the corporate market, and perceived resistance from CLCR players to MTN's contract period of three years.
- "SIM farms". Due to the nature of inter-network pricing against SIM card pricing, we believe VoIP cannot provide any significant additional savings over "fixed cellular" calls. However it appears if there are VoIP operators bundling cellular or GSM into their VoIP offerings and break these out of "SIM farms", which provided no real benefit to clients, but rather having to pay for expensive bandwidth as oppose to a local fixed cellular solution.
- "Connect Direct". Although this activity is seen as a cheaper alternative to CLCR, not only for clients but MNOs as well (through consolidation of cellular traffic), it appears if not all MNOs are in favour of this activity. Savings in CIBs, CLCR equipment cost and maintenance are major positives for the CLCR players.
- Introduction of SupremeCall by Telkom. It offers customers of Telkom savings on all major call types in return for a committed monthly amount of usage. It includes fixed-to-mobile (FtM) calls, and according to Telkom, offers savings of up to 25%, using per-second billing and not subject to the signing of long-term contracts. According to industry participants, a minimum one-year contract is needed, and if a customer billing is above the nominated amount, normal tariffs apply. The impact of SupremeCall on the CLCR market is difficult to quantify, being early days.

Investment implications

An analysis of the data in Table 14 reflects on the importance of Autopage (Altech) and Nashua (Reunert). Despite a declining contribution from Autopage in FY07, it remains meaningful at c40% of profits. In the case of Nashua, the profit contribution is between one-fifth and one-quarter. From this analysis, one would deduct that the two independent SPs are important in the lives of Altech and Reunert respectively.

Table 14: Contributions from independent SPs

%

	Autopage to Altech					Nashua to Reunert				
	FY03	FY04	FY05	FY06	FY07	FY02	FY03	FY04	FY05	FY06
Revenue	53	62	58	61	60	35	33	37	37	36
Operating profit	31	53	44	55	43	23	25	26	28	24
Headline earnings	26	39	45	50	41	19	33	26	25	25

Source: Company data, JPMorgan research..

The dynamics of the postpaid market has changed the last year or so, with subscriber acquisition in postpaid mainly driven by hybrid products. This together with a focus towards non-GSM voice products & services is expected to drive down ARPUs, and likely to put the brakes on longer-term revenue growth.

Deregulation of the telecommunications industry is however creating new opportunities for the independent SPs, with a positioning towards broadband and ISP / VoIP products and services. In CLCR, we do not expect Autopage and / or Nashua to play any meaningful role in consolidation, but rather focus on key initiatives such as retail, broadband and other types of telecom services.

Our investment views in the sector are unchanged, with only MTN rated at Overweight and Altech, Reunert and Telkom rated at Neutral.

Valuations

Altech. We continue to rate the share as Neutral. Although the group offers exposure to growth markets, it appears to us the share price has run ahead of earnings. It could be as result of the recent cautionary announcement, in tandem with ones issued by holding company Altron and sister company BTG. At a 12-month forward P/E of 12.4x, it is trading at a c20% premium to Reunert, which is not fully justified in our view.

Reunert. We maintain our Neutral rating, given the absence in our view of any share price catalyst in the short term. However it appears if the share has been oversold in recent months, having significantly underperformed its peer group and broader indices. At a 12-month forward P/E of 10.4x, it appears attractive and there is the risk that we have underestimated the longevity of the fixed investment cycle and Reunert’s positioning.

MTN. Our views are largely unchanged: 1) Exposure to the African mobile growth story; 2) Attractive ratings; and 3) Strong balance sheet and ability to play a role in industry consolidation and convergence. It appears the market is pricing in lower growth and returns for MTN which in our view is unjustified, particularly looking beyond pedestrian earnings growth in FY07E. Looking beyond current market volatility, we continue to favour the mobile growth story of MTN at conservative multiples. We continue to rate MTN Overweight.

Telkom. The changing regulatory landscape and strategic review of mobile strategy add significant uncertainty and volatility to the current valuation of Telkom. Although we regard the implied P/E and EV/EBITDA of the fixed line business as attractive, corporate activity is required to unlock value, in our view. We believe Telkom is a classical "value trap" at present and therefore we maintain our Neutral rating.

Risks to ratings

Altech

Altech is a beneficiary of fixed investment spending in electrification and telecom equipment and afforded a similar rating to Reunert, which in our view should not be the case. We also believe it has been significantly rerated ahead of earnings performance

MTN

- *Competition and regulation in key markets*, such as South Africa and Nigeria. The introduction of MNVO model (South Africa) and unified licences (Nigeria) could change the competitive landscape. We believe that with mobile pricing in the spotlight, changes to interconnect tariffs are possible.
- *Macro and political environment*. Most markets in which MTN operates are not exactly stable from a political point of view. In the case of Nigeria, we would hope for peaceful elections.
- *Forecasting*. The 1) impact of the expiry of the Pioneer tax status in Nigeria; 2) roll-out of start-up operations in markets such as Afghanistan and Iran; 3) realisation of cost-savings from the Investcom integration; and 4) exposure to 21 different local currencies; have introduced a higher degree of forecasting risk with respect to the medium-term earnings outlook of the group.
- *Execution:* The new organisational structure is largely untested, with “new” executives taking responsibility for regions such as WECA and MENA

Reunert

The group’s level of disclosure has deteriorated during the past few years in our view. We believe a policy of not being more transparent could in the longer term affect the rating of the group and hurt management credibility.

On the upside, there is a risk that we underestimate the duration and timing of the demand cycle for the Electrical Engineering division and that Reunert’s positioning is better than expected.

Telkom

We perceive the main downside risk to be that the group is tempted into investing excess cash in value-destroying acquisitions rather than return such cash to investors. On the upside, our current valuation is purely based on fundamentals and excludes any potential corporate activity related to the review of mobile strategy.

Conclusion

The CLCR market, at cR2.5bn per annum in size, is poised for consolidation, given the competitive threats from not only changes in technology (such as VoIP) and potential regulatory tariff intervention but also the emergence of new developments in aspects such as “direct connect” and CLCR aggregation. Although not a “dying” sub-segment of the LCR market, growth rates have slowed and participants in this market segment will likely need to reinvent themselves by changing their respective business models. Here, we would like to highlight aspects such telephone management systems (TMS), telephone audits and branching out into other segments of the voice market, utilising other LCR such as VoIP.

Johan Snyman
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

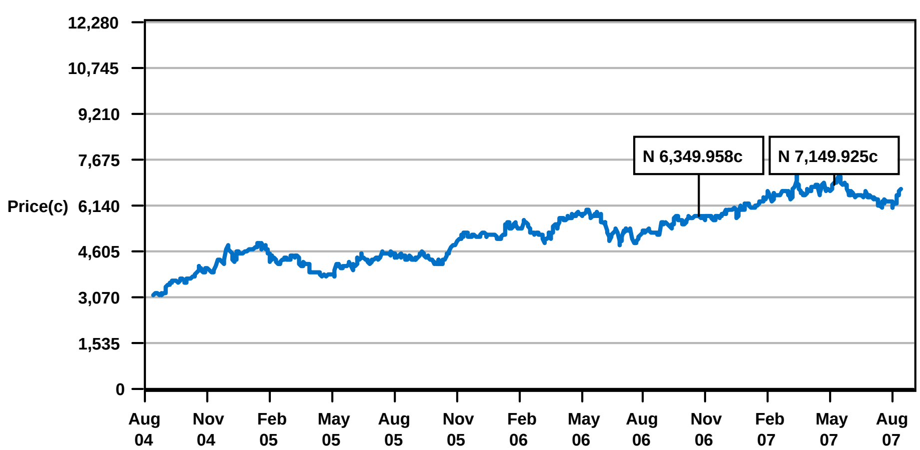
Companies Recommended in This Report (all prices in this report as of market close on 13 August 2007)
Altech (ALTJ.J/6,685c/Neutral), MTN Group Limited (MTNJ.J/10,045c/Overweight), Reunert Ltd (RLOJ.J/6,825c/Neutral), Telkom SA Ltd (TKGJ.J/17,192c/Neutral)

Analyst Certification:
The research analyst(s) denoted by an "AC" on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an "AC" on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect his or her personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report.

Important Disclosures

- **Market Maker/ Liquidity Provider:** JPMSL and/or an affiliate is a market maker and/or liquidity provider in Altech, Reunert Ltd.
- **Client of the Firm:** MTN Group Limited is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company non-securities-related services. Reunert Ltd is or was in the past 12 months a client of JPMSI. Telkom SA Ltd is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company non-investment banking securities-related service.
- **Investment Banking (next 3 months):** JPMSI or its affiliates expect to receive, or intend to seek, compensation for investment banking services in the next three months from Reunert Ltd, Telkom SA Ltd.
- **Non-Investment Banking Compensation:** JPMSI has received compensation in the past 12 months for products or services other than investment banking from Telkom SA Ltd.

Altech (ALTJ.J) Price Chart

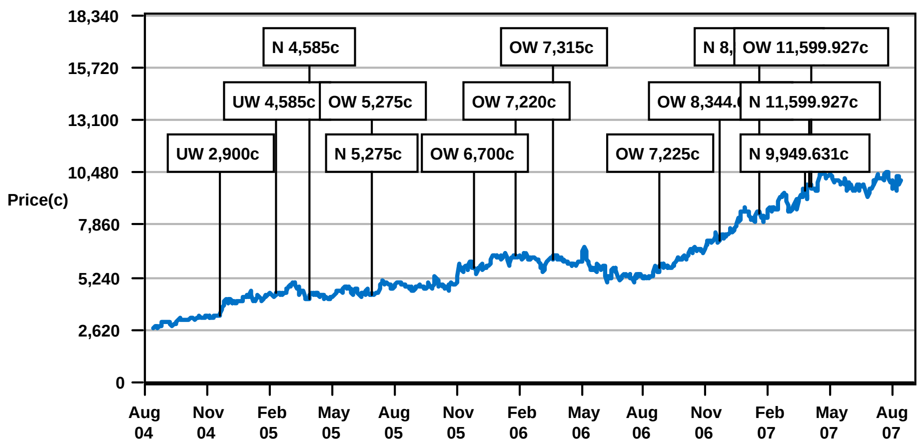


Date	Rating	Share Price (c)	Price Target (c)
20-Oct-06	N	5750	6350
07-May-07	N	6820	7150

Source: Reuters and JPMorgan; price data adjusted for stock splits and dividends.
Initiated coverage Oct 20, 2006. This chart shows JPMorgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
JPMorgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Johan Snyman
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

MTN Group Limited (MTNJ.J) Price Chart



Date	Rating	Share Price (c)	Price Target (c)
19-Nov-04	UW	3331	2900
10-Feb-05	UW	4500	4585
29-Mar-05	N	4150	4585
28-Jun-05	N	4376	5275
29-Jun-05	OW	4400	5275
25-Nov-05	OW	5695	6700
25-Jan-06	OW	6395	7220
23-Mar-06	OW	6135	7315
25-Aug-06	OW	5730	7225
21-Nov-06	OW	7100	8345
18-Jan-07	N	8440	8840
26-Mar-07	N	9600	9950
02-Apr-07	N	9799	11600
03-Apr-07	OW	9799	11600

Source: Reuters and JPMorgan; price data adjusted for stock splits and dividends.
This chart shows JPMorgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
JPMorgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Reunert Ltd (RLOJ.J) Price Chart

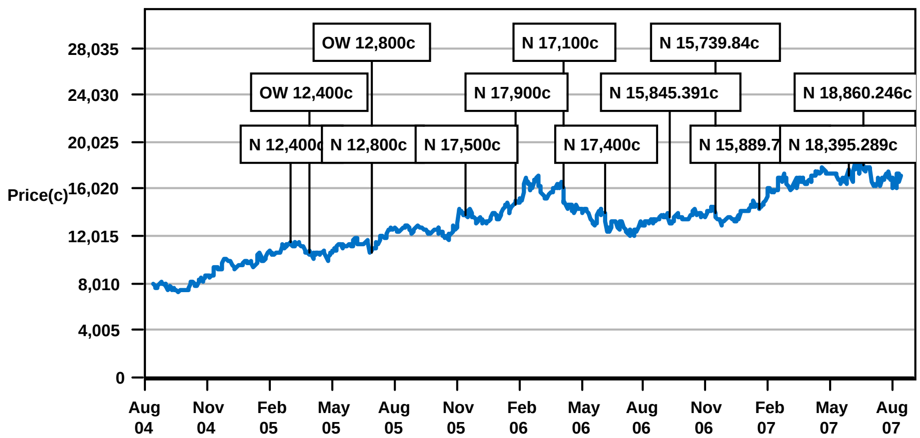
Date	Rating	Share Price (c)	Price Target (c)
03-Apr-07	N	8112	8740

Source: Reuters and JPMorgan; price data adjusted for stock splits and dividends.
Initiated coverage Apr 03, 2007. This chart shows JPMorgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
JPMorgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Johan Snyman
(27-11) 507-0377
johan.x.snyman@jpmorgan.com

JPMorgan

Telkom SA Ltd (TKGJ.J) Price Chart



Date	Rating	Share Price (c)	Price Target (c)
02-Mar-05	N	11530	12400
29-Mar-05	OW	10640	12400
28-Jun-05	OW	10575	12800
29-Jun-05	N	10770	12800
15-Nov-05	N	13745	17500
25-Jan-06	N	14750	17900
06-Apr-06	N	16065	17100
05-Jun-06	N	13900	17400
07-Sep-06	N	13650	15845
14-Nov-06	N	13950	15740
18-Jan-07	N	14380	15890
28-May-07	N	17151	18395
19-Jun-07	N	18105	18860

Source: Reuters and JPMorgan; price data adjusted for stock splits and dividends.
This chart shows JPMorgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
JPMorgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Explanation of Equity Research Ratings and Analyst(s) Coverage Universe:
JPMorgan uses the following rating system: **Overweight** [Over the next six to twelve months, we expect this stock will outperform the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] **Neutral** [Over the next six to twelve months, we expect this stock will perform in line with the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] **Underweight** [Over the next six to twelve months, we expect this stock will underperform the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] The analyst or analyst's team's coverage universe is the sector and/or country shown on the cover of each publication. See below for the specific stocks in the certifying analyst(s) coverage universe.

Coverage Universe: **Johan Snyman:** Altech (ALTJ.J), Altron (ATNJ.J), Bytes Technology Group Ltd (BTGJ.J), Datatec Ltd (DTCJ.J), MTN Group Limited (MTNJ.J), Reunert Ltd (RLOJ.J), Telkom SA Ltd (TKGJ.J)

JPMorgan Equity Research Ratings Distribution, as of June 29, 2007

	Overweight (buy)	Neutral (hold)	Underweight (sell)
JPM Global Equity Research Coverage	44%	41%	16%
IB clients*	50%	50%	38%
JPMSI Equity Research Coverage	40%	47%	13%
IB clients*	69%	62%	48%

*Percentage of investment banking clients in each rating category.
For purposes only of NASD/NYSE ratings distribution rules, our Overweight rating falls into a buy rating category; our Neutral rating falls into a hold rating category; and our Underweight rating falls into a sell rating category.

Valuation and Risks: Please see the most recent company-specific research report for an analysis of valuation methodology and risks on any securities recommended herein. Research is available at http://www.morganmarkets.com , or you can contact the analyst named on the front of this note or your JPMorgan representative.

Analysts' Compensation: The equity research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues, which include revenues from, among other business units, Institutional Equities and Investment Banking.

Other Disclosures

Options related research: If the information contained herein regards options related research, such information is available only to persons who have received the proper option risk disclosure documents. For a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options, please contact your JPMorgan Representative or visit the OCC's website at http://www.optionsclearing.com/publications/risks/riskstoc.pdf.

Legal Entities Disclosures
U.S.: JPMSI is a member of NYSE, NASD and SIPC. J.P. Morgan Futures Inc. is a member of the NFA. JPMorgan Chase Bank, N.A. is a member of FDIC and is authorized and regulated in the UK by the Financial Services Authority. **U.K.:** J.P. Morgan Securities Ltd. (JPMSL) is a member of the London Stock Exchange and is authorised and regulated by the Financial Services Authority. Registered in England & Wales No. 2711006. Registered Office 125 London Wall, London EC2Y 5AJ. **South Africa:** J.P. Morgan Equities Limited is a member of the Johannesburg Securities Exchange and is regulated by the FSB. **Hong Kong:** J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong. **Korea:** J.P. Morgan Securities (Far East) Ltd, Seoul branch, is regulated by the Korea Financial Supervisory Service. **Australia:** J.P. Morgan Australia Limited (ABN 52 002 888 011/AFS Licence No: 238188) is regulated by ASIC and J.P. Morgan Securities Australia Limited (ABN 61 003 245 234/AFS Licence No: 238066) is a Market Participant with the ASX and regulated by ASIC. **Taiwan:** J.P.Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Commission. **India:** J.P. Morgan India Private Limited is a member of the National Stock Exchange of India Limited and The Stock Exchange, Mumbai and is regulated by the Securities and Exchange Board of India. **Thailand:** JPMorgan Securities (Thailand) Limited is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission. **Indonesia:** PT J.P. Morgan Securities Indonesia is a member of the Jakarta Stock Exchange and Surabaya Stock Exchange and is regulated by the BAPEPAM. **Philippines:** J.P. Morgan Securities Philippines Inc. is a member of the Philippine Stock Exchange and is regulated by the Securities and Exchange Commission. **Brazil:** Banco J.P. Morgan S.A. is regulated by the Comissao de Valores Mobiliarios (CVM) and by the Central Bank of Brazil. **Japan:** This material is distributed in Japan by JPMorgan Securities Japan Co., Ltd., which is regulated by the Japan Financial Services Agency (FSA). **Singapore:** This material is issued and distributed in Singapore by J.P. Morgan Securities Singapore Private Limited (JPMSS) [mica (p) 069/09/2006 and Co. Reg. No.: 199405335R] which is a member of the Singapore Exchange Securities Trading Limited and is regulated by the Monetary Authority of Singapore (MAS) and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore) which is regulated by the MAS. **Malaysia:** This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-x) which is a Participating Organization of Bursa Malaysia Securities Bhd and is licensed as a dealer by the Securities Commission in Malaysia. **Pakistan:** J. P. Morgan Pakistan Broking (Pvt.) Ltd is a member of the Karachi Stock Exchange and regulated by the Securities and Exchange Commission of Pakistan.

Country and Region Specific Disclosures
U.K. and European Economic Area (EEA): Issued and approved for distribution in the U.K. and the EEA by JPMSL. Investment research issued by JPMSL has been prepared in accordance with JPMSL's Policies for Managing Conflicts of Interest in Connection with Investment Research which can be found at http://www.jpmorgan.com/pdfdoc/research/ConflictManagementPolicy.pdf. This report has been issued in the U.K. only to persons of a kind described in Article 19 (5), 38, 47 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is only available to relevant persons and will be engaged in only with relevant persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction **Germany:** This material is distributed in Germany by J.P. Morgan Securities Ltd. Frankfurt Branch and JPMorgan Chase Bank, N.A., Frankfurt Branch who are regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht. **Australia:** This material is issued and distributed by JPMSAL in Australia to "wholesale clients" only. JPMSAL does not issue or distribute this material to "retail clients." The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of JPMSAL. For the purposes of this paragraph the terms "wholesale client" and "retail client" have the meanings given to them in section 761G of the Corporations Act 2001. **Hong Kong:** The 1% ownership disclosure as of the previous month end satisfies the requirements under Paragraph 16.5(a) of the Hong Kong Code of Conduct for persons licensed by or registered with the Securities and Futures Commission. (For research published within the first ten days of the month, the disclosure may be based on the month end data from two months' prior.) J.P. Morgan Broking (Hong Kong) Limited is the liquidity provider for derivative warrants issued by J.P. Morgan International Derivatives Ltd and listed on The Stock Exchange of Hong Kong Limited. An updated list can be found on HKEx website: http://www.hkex.com.hk/prod/dw/Lp.htm. **Korea:** This report may have been edited or contributed to from time to time by affiliates of J.P. Morgan Securities (Far East) Ltd, Seoul branch. **Singapore:** JPMSI and/or its affiliates may have a holding in any of the securities discussed in this report; for securities where the holding is 1% or greater, the specific holding is disclosed in the Legal Disclosures section above. **India:** For private circulation only not for sale. **Pakistan:** For private circulation only not for sale. **New Zealand:** This material is issued and distributed by JPMSAL in New Zealand only to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money. JPMSAL does not issue or distribute this material to members of "the public" as determined in accordance with section 3 of the Securities Act 1978. The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of JPMSAL.

General: Additional information is available upon request. Information has been obtained from sources believed to be reliable but JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively JPMorgan) do not warrant its completeness or accuracy except with respect to any disclosures relative to JPMSI and/or its affiliates and the analyst's involvement with the issuer that is the subject of the research. All pricing is as of the close of market for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein. JPMSI distributes in the U.S. research published by non-U.S. affiliates and accepts responsibility for its contents. Periodic updates may be provided on companies/industries based on company specific developments or announcements, market conditions or any other publicly available information. Clients should contact analysts and execute transactions through a JPMorgan subsidiary or affiliate in their home jurisdiction unless governing law permits otherwise.

Revised June 25, 2007.
