## Macquarie Research **Equities**





**INDIA** 

## Hindustan Zinc

#### 12 January 2007

HZ IN	0	utperform
Stock price as of 10 Jan 07 12-month target Upside/downside Valuation - DCF (WACC 12.0%)	Rs Rs % Rs	770.45 1,160.00 +50.6 804.00
GICS sector Market cap 30-day avg turnover Market cap Number shares on issue	Rs m Rs m US\$m m	materials 325,540 209.5 7,324 422.5

#### Investment fundamentals

Year end 31 Mar		2006A	2007E	2008E	2009E
Total revenue	m	38,770	86,718	91,631	87,524
EBIT	m	21,612	66,521	70,279	63,176
EBIT Growth	%	161.5	207.8	5.6	-10.1
Recurring profit	m	22,296	69,036	74,865	69,320
Reported profit	m	14,725	45,593	49,443	45,781
Adjusted profit	m	14,725	45,593	49,443	45,781
	_				
EPS rep	Rs	34.85	107.91	117.02	108.35
EPS rep growth	%	109.3	209.6	8.4	-7.4
EPS adj	Rs	34.85	107.91	117.02	108.35
EPS adj growth	%	109.3	209.6	8.4	-7.4
PE rep	Х	22.1	7.1	6.6	7.1
PE adj	Х	22.1	7.1	6.6	7.1
Total DPS	Rs	2.50	5.00	7.50	10.00
Total div yield	%	0.3	0.6	1.0	1.3
rotal alv yiela	70	0.0	0.0	1.0	1.0
ROA	%	53.4	91.1	57.1	37.1
ROE	%	53.5	81.6	49.2	31.8
EV/EBITDA	Х	13.0	4.4	4.1	4.6
Net debt/equity	%	14.1	-35.7	-57.6	-69.3
Price/book	Х	9.5	4.2	2.6	2.0

## HZ IN rel SENSEX performance, & rec history



Source: Datastream, Macquarie Research, January 2007 (all figures in INR unless noted)

#### Analyst

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## Strong results, but expectation higher

#### **Event**

 Hindustan Zinc declared strong 3Q FY3/07 results. Although the results are roughly 10% below our estimates, they are well on course to beat our full-year estimates, which are 8% ahead of consensus.

#### **Impact**

- Strong 3Q results: Net sales at Rs24.8bn grew 171%, driven by a 150% increase in realisation and a 12% increase in metal sold. EBITDA, at Rs19.1bn, grew 265%. Net profit, at Rs13.1bn, grew 300%.
- Sales lower than expected: Quantity of metal sold was lower than our estimates by around 10%, in spite of in-line production; this is one of the prime contributors to the lower-than-expected profits. Inventory of metal contained in concentrate has increased by roughly 18,000t.
- Cost sharp upswing: Operating margins have stagnated QoQ despite a 24% increase in realisation based on higher costs. Royalty costs are at 6% of LME zinc price and have predictably gone up. However, the sharp increase in mining and manufacturing costs needs some explanation. The last quarterly results of Vedanta had indicated strategic hedging of 78,000t of zinc for FY07 and FY08. We are awaiting clarification from management whether any losses have been booked on account of this.
- Above-consensus earnings estimate looks conservative: We have estimated EPS of Rs108 for FY07, which is 8% higher than consensus. The company has already posted EPS of Rs86 in the first three quarters and shall easily surpass our estimate, as zinc prices even after three cuts in a month are near our forecast price of US\$3,800/tonne.
- Expansion on track: Expansion of the 170,000-tonne zinc smelter along with a corresponding increase in mine capacity will be completed by early 2008.

#### **Earnings revision**

No change.

#### **Price catalyst**

- 12-month price target: Rs1,160.00 based on a PER methodology.
- Catalyst: Strong earnings growth, high cash flow and sustainability of higher profits.

#### **Action and recommendation**

- Outperform maintained: Given the bullish view on zinc prices in FY08 and expected 50% volume growth in FY09, we estimate sustained high profitability. We expect earnings upgrades to drive the stock price.
- Valuations attractive: HZ with one of the best mining assets, and huge possibility to add more reserves – is trading below its NPV of Rs804 and is one of the cheapest on this basis among its global peers.

Please refer to the important disclosures on inside back cover of this document, or on our website www.macquarie.com.au/research/disclosures.

Fig 1 3QF3/07 results – strong performance

Rs m	3Q07	3Q06	YoY%	2Q07	QoQ%'
Net sales	24,800	9,140	171%	24,410	2%
EBITDA	19,070	5,220	265%	18,560	3%
EBITDA margin %	77%	57%		76%	
Depreciation	370	350	6%	370	0%
Interest	110	210	-48%	100	10%
PBT (operations)	18,590	4,660	299%	18,090	3%
Other income	640	180	256%	460	39%
PBT (recurring)	19,230	4,840	297%	18,550	4%
Exceptionals	-	-		-	
PBT (reported)	19,230	4,840	297%	18,550	4%
Tax	6,100	1,550		5,570	
Profit after tax	13,130	3,290	299%	12,980	1%
Source: Macquarie Research, C	January 2007				

Fig 2 Operating performance – lower sales

Zinc – mined metal content	127,699	127,351	0%	124,474	3%
Refined zinc	92,759	68,881	35%	78,444	18%
Lead - mined metal content	17,312	15,926	9%	14,604	19%
Refined lead	13,783	5,891	134%	10,762	28%
Concentrate sales volume	38.000	65.000		89.501	-58%
Zinc – metal sold	109,859	98,131	12%	133,719	-18%
Source: Macquarie Research, Janua	ary 2007				

Fig 3 Costs – on rise

Rs m	3Q07	3Q06	YoY%	2Q07	QoQ%'
Mining & manufacturing	2,680	2,650	1%	1,970	36%
Mining royalty	1,920	730	163%	1,500	28%
Staff costs	600	600	0%	660	-9%
Admin & selling	580	420	38%	810	-28%
Total expenditure	5,730	3,920	46%	5,850	-2%
Rs/t	3Q07	3Q06	YoY%	2Q07	QoQ%'
Mining & manufacturing	24,395	27,005	-10%	14,732	66%
Mining royalty	17,477	7,439	135%	11,218	56%
Staff costs	5,462	6,114	-11%	4,936	11%
Admin & selling	5.279	4.280	23%	6.057	-13%
Total expenditure	52,158	39,947	31%	43,748	19%
Source: Macquarie Research, Jan	uary 2007				

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Hindustan Zinc (HZ	IN Out	nerform	Target r	rice: Rs	1 160 00)						
Quarterly Results	iiv, Out	2Q/07A	3Q/07E	4Q/07E	1Q/08E	Profit & Loss		2006A	2007E	2008E	2009E
Bayanya		21,680	21,680	21,680	22,908	Revenue		38,770	86,718	91,631	87,524
Revenue Gross Profit	m m	17,385	17,385	17,385	18,388	Gross Profit	m m	24,642	69,539	73,553	67,026
Cost of Goods Sold	m	4,295	4,295	4,295	4,519	Cost of Goods Sold	m	14,128	17,179	18,078	20,498
EBITDA	m	17,014	17,014	17,014	17,986	EBITDA	m	22,994	68,055	71,942	64,967
Depreciation	m	384	384	384	416	Depreciation	m	1,383	1,534	1,663	1,791
Amortisation of Goodwill	m	0	0	0	0	Amortisation of Goodwill	m	0	0	0	0
Other Amortisation EBIT	m	0 46 630	16.630	0 46 630	0 47 570	Other Amortisation EBIT	m	0	0 66 F34	0 <b>70 270</b>	63.476
Net Interest Income	<b>m</b> m	<b>16,630</b> -103	<b>16,630</b> -103	<b>16,630</b> -103	<b>17,570</b> -89	Net Interest Income	<b>m</b> m	<b>21,612</b> -474	<b>66,521</b> -413	<b>70,279</b> -357	<b>63,176</b> -234
Associates	m	0	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	0	0	0	0	Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	732	732	732	1,236	Other Pre-Tax Income	m	1,158	2,927	4,943	6,378
Pre-Tax Profit	m	17,259	17,259	17,259	18,716	Pre-Tax Profit	m	22,296	69,036	74,865	69,320
Tax Expense Net Profit	m <b>m</b>	-5,861 <b>11,398</b>	-5,861 <b>11,398</b>	-5,861 <b>11,398</b>	-6,355 <b>12,361</b>	Tax Expense Net Profit	m	-7,571 <b>14,725</b>	-23,442 <b>45,593</b>	-25,422 <b>49,443</b>	-23,539 <b>45,781</b>
Minority Interests	m	0	0	0	0	Minority Interests	<b>m</b> m	0	45,595	<b>49,443</b> 0	45,761
Reported Earnings Adjusted Earnings	m m	11,398 11,398	11,398 11,398	11,398 11,398	12,361 12,361	Reported Earnings Adjusted Earnings	m m	14,725 14,725	45,593 45,593	49,443 49,443	45,781 45,781
EDS (rop)		26.00	26.98	26.98	29.25	EDS (ron)		24.05	107.91	117.02	108.35
EPS (rep) EPS (adj)		26.98 26.98	26.98 26.98	26.98 26.98	29.25 29.25	EPS (rep) EPS (adi)		34.85 34.85	107.91	117.02 117.02	108.35
EPS Growth yoy (adj)	%	209.6	209.6	209.6	8.4	EPS Growth (adj)	%	109.3	209.6	8.4	-7.4
Er o orowin yoy (daj)	70	200.0	200.0	200.0	0.1	PE (rep)	X	22.1	7.1	6.6	7.1
						PE (adj)	x	22.1	7.1	6.6	7.1
EBITDA Margin	%	78.5	78.5	78.5	78.5	Total DPS		2.50	5.00	7.50	10.00
EBIT Margin	%	76.7	76.7	76.7	76.7	Total Div Yield	%	0.3	0.6	1.0	1.3
Earnings Split	%	25.0	25.0	25.0	25.0	Weighted Average Shares	m	423	423	423	423
Revenue Growth	%	123.7	123.7	123.7	5.7	Period End Shares	m	423	423	423	423
EBIT Growth	%	207.8	207.8	207.8	5.6						
Profit and Loss Ratios		2006A	2007E	2008E	2009E	Cashflow Analysis		2006A	2007E	2008E	2009E
Revenue Growth	%	76.1	123.7	5.7	-4.5	EBITDA	m	22,994	68,055	71,942	64,967
EBITDA Growth	%	151.9	196.0	5.7	-9.7	Tax Paid	m	-6,238	-19,316	-20,947	-19,395
EBIT Growth	%	161.5	207.8	5.6	-10.1	Chgs in Working Cap	m	-4,810	-12,719	-1,131	2,181
Gross Profit Margin	%	63.6	80.2	80.3	76.6	Net Interest Paid	m	-474	-413	-357	-234
EBITDA Margin	%	59.3	78.5	78.5	74.2	Other	m	1,158	2,927	4,943	6,378
EBIT Margin	% %	55.7 38.0	76.7 52.6	76.7 54.0	72.2 52.3	Operating Cashflow Acquisitions	m	<b>12,630</b> 0	<b>38,536</b> 0	<b>54,450</b> 0	<b>53,896</b> 0
Net Profit Margin Payout Ratio	%	7.2	4.6	6.4	9.2	Capex	m m	-1,927	-4,522	-7,522	-6,322
EV/EBITDA	, х	13.0	4.4	4.1	4.6	Asset Sales	m	0	0	0	0,322
EV/EBIT	Х	13.8	4.5	4.2	4.7	Other	m	-9,170	Ö	Ō	0
						Investing Cashflow	m	-11,097	-4,522	-7,522	-6,322
Balance Sheet Ratios						Dividend (Ordinary)	m	-1,205	-2,409	-3,614	-4,818
ROE	%	53.5	81.6	49.2	31.8	Equity Raised	m	0	0	0	0
ROA	%	53.4	91.1	57.1	37.1	Debt Movements	m	-127	-1,320	30	-2,883
ROIC	%	54.3 14.1	112.3 -35.7	93.2 -57.6	79.9 -69.3	Other	m	0 4 222	0 3 <b>730</b>	0	0 <b>7 701</b>
Net Debt/Equity Interest Cover	% x	45.6	161.2	196.9	269.8	Financing Cashflow	m	-1,332	-3,729	-3,584	-7,701
Price/Book	x	9.5	4.2	2.6	2.0	Net Chg in Cash/Debt	m	201	30,284	43,345	39,873
Book Value per Share		81.2	183.4	291.8	388.8	Polonia Object		00004	20075	20005	20005
						Balance Sheet		2006A	2007E	2008E	2009E
						Cash Receivables	m m	740 6,899	31,922 15,430	75,331 16,304	115,083 15,574
						Inventories	m	3,831	8,569	9,054	8,649
						Investments	m	16,049	16,049	16,049	16,049
						Fixed Assets	m	19,181	22,169	28,028	32,559
						Intangibles	m	0	0	0	0
						Other Assets	m	1,624	3,632	3,838	3,666
						Total Assets	m	48,324	97,771	148,604	191,579
						Payables Short Term Debt	m m	0	0	0	0
						Long Term Debt	m	5,580	4,242	4,242	1,317
						Provisions	m	1,874	3,320	3,508	3,351
						Other Liabilities	m	6,572	12,727	17,542	22,636
						Total Liabilities	m	14,026	20,289	25,293	27,304
						Shareholders' Funds	m	34,298	77,482	123,312	164,275
						Minority Interests	m	0	0	0	0
						Other	m	0	77.492	0	0 464 275
						Total S/H Equity Total Liab & S/H Funds	m m	34,298 48,324	77,482 97,771	123,312 148,604	164,275 191,579
All Courses 1 1915							•••	,	,	,	,
All figures in INR unless note Source: Macquarie Research		2007									
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#### Important disclosures:

#### **Recommendation definitions**

#### Macquarie Australia/New Zealand

Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts)
Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts)
Underperform – return >5% below benchmark return

#### Macquarie Asia

Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%

(>2.5% below for listed property trusts)

#### Macquarie First South Securities (South Africa)

Outperform – return > 5% in excess of benchmark return

Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return

Recommendations - 12 months

**Note:** Quant recommendations may differ from Fundamental Analyst recommendations

#### **Recommendation proportions**

	AU/NZ	Asia	RSA			
Outperform	43.12%	58.91%	42.20%			
Neutral	44.98%	22.92%	46.80%			
Underperform	11.90%	18.17%	11.00%			
For quarter ending 31 December 2006						

#### Volatility index definition\*

This is calculated from the volatility of historic price

**Very high-highest risk** – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

**High** – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

**Medium** – stock should be expected to move up or down at least 30–40% in a year.

**Low-medium** – stock should be expected to move up or down at least 25–30% in a year.

**Low** – stock should be expected to move up or down at least 15–25% in a year.

\* Applicable to Australian/NZ stocks only

#### **Financial definitions**

total assets

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa\*
ROA = adjusted ebit / average total assets
ROA Banks/Insurance = adjusted net profit /average

**ROE** = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation \*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

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Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Robert Burghart (Japan) Paul Hwang (Korea) Woochang Chung (Korea)	(9122) 6653 3046 (813) 3512 7871 (813) 3512 7853 (822) 3705 8678 (822) 3705 8667

Duane Sandberg (Japan) Christina Lee (Korea)	(813) 3512 7867 (822) 3705 8670
Paul Hwang (Korea)	(822) 3705 8678
Woochang Chung (Korea)	(822) 3705 8667
Edward Ong (Malaysia)	(603) 2059 8982
Nadine Javellana (Philippines)	(632) 857 0890
Chris Clayton (Thailand)	(662) 694 7829
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Robert Burghart (Japan)	(813) 3512 7853
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Nadine Javellana (Philippines)	(632) 857 0890
Jeremy Chen (Taiwan)	(8862) 2734 7521
Scott Weaver (Taiwan)	(8862) 2734 7512
Insurance	
Chris Esson (China, Taiwan)	(852) 2823 3567
Sales	
Regional Heads of Sales	
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Media	
Ramiz Chelat (Asia) Prem Jearajasingam (Malaysia)	(852) 2823 3587 (603) 2059 8989
Metals and Mining	
Simon Francis (Asia) Felix Lam (China, HK, Taiwan) Rakesh Arora (India) Adam Worthington (Indonesia) Christina Lee (Korea)	(852) 2823 3590 (852) 2823 3575 (9122) 6653 3054 (6221) 515 7338 (822) 3705 8670
Oil and Gas	
David Johnson (Asia) Scott Weaver (China, Taiwan) Jal Irani (India) Mark Barclay (Korea) Edward Ong (Malaysia) Kitti Nathisuwan (Thailand)	(852) 2823 4691 (8862) 2734 7512 (9122) 6653 3040 (822) 3705 8658 (603) 2059 8982 (662) 694 7724
Pharmaceuticals	
Shubham Majumder (India)	(9122) 6653 3049
Property	
Matt Nacard (Asia) Eva Lee (Hong Kong) Siddhartha Gupta Takashi Sakai (Japan) Francis Eng (Malaysia) Gilbert Lopez (Philippines) Tuck Yin Soong (Singapore) Corinne Jian (Taiwan) Monchai Jaturanpinyo (Thailand)	(852) 2823 4731 (852) 2823 3573 (9122) 6653 3048 (813) 3512 7884 (603) 2059 8986 (632) 857 0898 (65) 6231 2838 (8862) 2734 7529 (662) 694 7727

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Suveer Chainani (India)	(9122) 6653 3045
Damian Thong (Japan)	(813) 3512 7877
David Gibson (Japan)	(813) 3512 7880
George Chang (Japan)	(813) 3512 7854
Yoshihiro Shimada (Japan)	(813) 3512 7862
Do Hoon Lee (Korea)	(822) 3705 8641
Michael Bang (Korea)	(822) 3705 8659
Patrick Yau (Singapore)	(65) 6231 2835
Cheryl Hsu (Taiwan)	(8862) 2734 7522
Daniel Chang (Taiwan)	(8862) 2734 7516
Dominic Grant (Taiwan)	(8862) 2734 7528
Jessica Chang (Taiwan)	(8862) 2734 7518
Nicholas Teo (Taiwan)	(8862) 2734 7523
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Tim Smart (Asia)	(852) 2823 3565
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Shubham Majumder (India)	(9122) 6653 3049
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Richard Moe (Thailand)	(662) 694 7753

Transport	&	Logistics

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Adam Worthington (Indonesia)	(6221) 515 7338
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Adam Rowley	(4420) 7065 2013
Bonnie Liu	(4420) 7065 2014
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#### **Data Services**

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#### **Economics**

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Bill Belchere (Asia)	(852) 2823 4636
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Paul Cavey (China)	(852) 2823 3570
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#### Quantitative

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#### Strategy/Country

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Desh Peramunetilleke (Asia)	(852) 2823 3564
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Eugene Ha (Korea)	(822) 3705 8643
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Gilbert Lopez (Philippines)	(632) 857 0898
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Michelle Paisley (China, Hong Kong)	(852) 2823 3516
Ulrike Pollak-Tsutsumi (Frankfurt)	(49) 69 7593 8747
Daniel Fust (Geneva)	(41) 22 818 7710
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Ajay Bhatia (India)	(9122) 6653 3200
Stuart Smythe (India)	(9122) 6653 3200
Eugene Ha (Korea)	(822) 3705 8643
K.Y. Nam (Korea)	(822) 3705 8607
Derek Wilson (London)(N Asia)	(44) 20 7065 5856
Julien Roux (London)	(44) 20 7065 5887
Lena Yong (Malaysia)	(603) 2059 8888
Ismael Pili (Philippines)	(65) 6231 2840
Greg Norton-Kidd (New York)	(1 212) 231 2527
Luke Sullivan (New York)	(1 212) 231 2507

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=	
Mark Lawrence (New York)	(1 212) 231 2516
Sheila Schroeder (San Francisco)	(1 415) 835 1235
Giles Heyring (Singapore)	(65) 6231 2888
Mark Duncan (Taiwan)	(8862) 2734 7510
Angus Kent (Thailand)	(662) 694 7601
Dominic Henderson (Tokyo)	(813) 3512 7820
Nick Cant (Tokyo)	(813) 3512 7821
Charles Nelson (UK/Europe)	(44) 20 7065 2032
Rob Fabbro (UK/Europe)	(44) 20 7065 2031

#### **Sales Trading**

•	
Anthony Wilson (Asia)	(852) 2823 3511
Mona Lee (Hong Kong)	(852) 2823 3519
Stuart Goddard (Europe)	(44) 20 7065 2033
Vijay Gussain (India)	(9122) 6653 3205
Howard Yoon (Korea)	(822) 3705 8601

#### Sales Trading cont'd

Robert Risman (New York)	(1 212) 231 2555
Isaac Huang (Taiwan)	(8862) 2734 7582
Kenichi Ohtaka (Tokyo)	(813) 3512 7830
Index Sales	
Margaret Hartmann	(612) 8232 9834

### **Alternative Strategies**

•	
Convertibles - Roland Sharman	(852) 2823 4628
Depository Receipts - Robert Ansell	(852) 2823 4688
Derivatives - Vipul Shah	(852) 2823 3523
Futures - Tim Smith	(852) 2823 4637
Hedge Fund Sales - Darin Lester	(852) 2823 4736
Structured Products - Andrew Terlich	(852) 2249 3225