

Notes to the consolidated annual financial continued

Rm	2016	2015
31. Financial instruments and risk management		
31.1 Net (losses)/gains on financial instruments		
Net (losses)/gains on financial instruments analysed by category are as follows:		
Financial assets and liabilities at fair value through profit or loss	(349)	42
Loans and receivables	306	312
Available-for-sale financial assets	12	2
Financial liabilities measured at amortised cost	(2 085)	(1 639)
Net losses attributable to financial instruments	(2 116)	(1 283)
31.2 Carrying amounts of financial instruments		
Carrying amounts of financial instruments analysed by category, are as follows:		
Financial assets measured at amortised cost ¹	24 630	21 294
Financial assets at fair value through profit or loss	360	246
Available-for-sale financial assets (Note 11.3)	39	39
Derivatives designated as fair value hedging instruments (Note 14 and 19)	(96)	34
Derivatives designated as cash flow hedging instruments (Note 14 and 19)	–	(6)
Financial liabilities measured at amortised cost	(44 280)	(40 747)
	(19 347)	(19 140)
Note:		
1. Included in the current and prior years' amounts are cash held in restricted deposits.		
31.3 Fair value hierarchy		
The table below sets out the valuation basis of financial instruments measured at fair value:		
Level one ¹		
Financial assets and liabilities at fair value through profit or loss, classified as held for trading		
Unit trust investments (Note 11)	187	73
Level two ²		
Derivatives designated as fair value hedging instruments		
Derivative financial assets (Note 14)	73	124
Derivative financial liabilities (Note 19)	(169)	(89)
Derivatives designated as cash flow hedging instruments		
Derivative financial liabilities (Note 19)	–	(6)
Level three ³		
Financial assets and liabilities at fair value through profit or loss, classified as held for trading and designated		
Equity linked notes (Note 11)	173	173
	264	275

Notes:

1. Level one classification is used when the valuation is determined using quoted prices in an active market.
2. Level two classification is used when valuation inputs used to determine fair value are observable for the asset/(liability), either directly as prices or indirectly when derived from prices.
3. Level three classification is used when unobservable valuation inputs are used to determine the fair value for the asset/(liability).

31. Financial instruments and risk management continued

31.4 Financial risk management

The Group's normal operations, its sources of finance and changing market conditions expose it to various financial risks, which highlights the importance of financial risk management as an element of control. Principal financial risks faced by the Group are foreign currency, interest rate, equity price, credit, liquidity and insurance risk.

The Group's treasury function provides a centralised service to the Group for co-ordinating access to domestic and international financial markets and the managing of foreign currency, interest rate and liquidity risk. The aforementioned risks are managed, subject to the limitations of the local markets in which the various Group companies operate and the South African Reserve Bank Regulations. Treasury operations are conducted within a framework of policies and guidelines authorised and reviewed annually by the Board.

The Group uses a number of derivative instruments that are transacted for foreign currency and interest rate risk management purposes only. There has been no significant change during the reporting period, or since the end of the reporting period, to the types of financial risks faced by the Group, the measures used to measure them or the objectives, policies and processes for managing them.

31.4.1 Market risk management

The Group's activities expose it to the risks of fluctuations in foreign currency exchange rates (Note 31.4.1.1), interest rates (Note 31.4.1.2) and equity prices (Note 31.4.1.3).

Market risk exposures are measured using sensitivity analyses, which show how profit post tax or equity post tax would have been affected by changes in the relevant risk variable that were reasonably possible at the reporting date. Sensitivity analyses are for illustrative purposes only as, in practice, market rates rarely change in isolation. Details of changes in the methods and assumptions used in preparing the sensitivity analyses are disclosed in the respective sensitivity analyses.

Notes to the consolidated annual financial continued**31. Financial instruments and risk management** continued**31.4 Financial risk management** continued**31.4.1 Market risk management** continued**31.4.1.1 Foreign currency risk management**

Various monetary items exist in currencies other than the functional currencies of the entities within the Group. The tables below disclose the net currency exposure (net carrying amount of foreign-denominated monetary assets/(liabilities) expressed in the presentation currency of the Group) per functional currency. The Group is mainly exposed to the euro and United States dollar and to a lesser extent to the Congolese franc, pound sterling, Swiss franc, Australian dollar, Tanzanian shilling, Mozambican metical, Mauritian rupee, Lesotho maloti, Nigerian naira, Zambian kwacha and South African rand which is combined as 'Other'.

	Euro	United States dollar	Other
2016			
Functional currency			
South African rand	(22)	(316)	(3)
United States dollar	1	–	(5)
Tanzanian shilling	(25)	112	–
Mozambican metical	12	46	(8)
Nigerian naira	(1)	38	(3)
	(35)	(120)	(19)
2015			
Functional currency			
South African rand	(144)	(1 175)	(8)
United States dollar	(3)	–	(2)
Tanzanian shilling	(156)	(56)	(12)
Mozambican metical	(43)	59	(35)
	(346)	(1 172)	(57)

The Group's South African operations manages its exposure to fluctuations in foreign currency exchange rates by entering into foreign exchange forward contracts for foreign-denominated transactions above certain monetary levels. The contracts are entered into for specific transactions and are matched with anticipated future cash flows, in foreign currencies, primarily for the purchase of capital equipment and to a lesser extent operating expenditure. The Group's policy is generally that entities within the Group borrow funds denominated in their respective functional currencies, however, in those instances where funds are borrowed in foreign-denominated currencies and a forward market exists, exposure to fluctuations in foreign currency exchange rates is managed by entering into foreign exchange forward contracts.

31. Financial instruments and risk management continued

31.4 Financial risk management continued

31.4.1 Market risk management continued

31.4.1.1 Foreign currency risk management continued

The tables below provide a currency split of the Group's net derivative financial assets and liabilities relating to material open foreign exchange forward contracts at the reporting date:

Rm	2016	2015
Forward contracts to buy foreign currency		
Euro ¹	3	(16)
Pound sterling ²	(2)	(3)
United States dollar ³	(101)	86
Net derivative financial (liability)/asset	(100)	67
Notes:		
Foreign contract values amount to:		
1. €27 million (2015:€49 million)		
2. £4 million (2015:£7 million)		
3. US\$146 million (2015: US\$305 million)		
Forward contracts to sell foreign currency		
Euro ¹	(1)	1
Pound sterling ²	–	1
United States dollar ³	31	(11)
Net derivative financial asset/(liability)	30	(9)

Notes:

Foreign contract values amount to:

1. €2 million (2015: €51 million).

2. £0.4 million (£4 million).

3. US\$35 million (2015: US\$47 million).

Of the R70 million net liability (2015: R58 million net asset), R62 million (2015: R100 million) is reported in trade and other receivables and R132 million (2015: R43 million) in trade and other payables.

Notes to the consolidated annual financial continued

31. Financial instruments and risk management continued

31.4 Financial risk management continued

31.4.1 Market risk management continued

31.4.1.1 Foreign currency risk management continued

Foreign currency sensitivity analysis

The analysis below, expressed in the Group's presentation currency, discloses the Group's sensitivity to the specified percentage change in the functional currencies against the relevant foreign currencies exposed to. Management's assessment of a reasonable possible change in prevailing non-African and African foreign currency exchange rates is based on estimated interest rate differentials.

The analysis includes outstanding foreign-denominated monetary items only and adjusts their translations, at the reporting date, to the relevant functional currencies with the specified percentage change.

A positive number indicates an increase and a negative number a decrease in profit post tax, where the functional currencies are expected to strengthen against the relevant foreign currencies. For the same percentage weakening the impact would be equal and opposite.

	Euro	United States dollar	Other
2016			
Functional currency			
South African rand (%)	3.1	0.5	2.7 – 27.7
United States dollar (%)	2.6	–	0.5 – 26.5
Tanzanian shilling (%)	2.5	5.2	0.9 – 12.0
Mozambican metical (%)	23.2	26.5	5.8 – 27.1
Profit post tax (Rm)	(8)	(25)	1
2015			
Functional currency			
South African rand (%)	12.1	4.1	2.1 – 9.7
United States dollar (%)	16.9	–	0.2 – 13.4
Tanzanian shilling (%)	17.2	0.2	1.3 – 15.7
Mozambican metical (%)	1.3	13.4	2.3 – 13.6
Profit post tax (Rm)	(8)	(61)	2

Closing exchange rates used at the reporting date are as follows:

2016			
Functional currency			
South African rand	16.7	21.1	14.7
United States dollar	1.1	1.4	–
Tanzanian shilling	2 488.1	3 146.7	2 186.2
Mozambican metical	58.5	74.0	51.4
2015			
Functional currency			
South African rand	13.0	18.0	12.1
United States dollar	1.1	1.5	–
Tanzanian shilling	1 988.3	2 750.8	1 853.3
Mozambican metical	39.5	54.7	36.8

31. Financial instruments and risk management continued

31.4 Financial risk management continued

31.4.1 Market risk management continued

31.4.1.2 Interest rate risk management

The Group is exposed to fair value and cash flow interest rate risk as a result of its fixed and floating rate loans receivable, borrowings, finance receivables, interest rate swaps and bank balances. The Group's interest rate profile can be summarised as follows:

Rm	2016	2015
Financial assets		
Fixed rate financial assets	6 190	5 199
Floating rate financial assets	6 750	8 107
	12 940	13 306
Financial liabilities		
Fixed rate financial liabilities	(6 981)	(2 184)
Floating rate financial liabilities	(21 708)	(23 424)
	(28 689)	(25 608)

The floating rates which the Group is exposed to, is the South African prime, South African BA, JIBAR, South African money market, LIBOR, Lesotho prime and Tanzanian reference treasury bill rates.

The Group's policy is to maintain an appropriate mix between fixed and floating rate instruments. The Group specifically manages its exposure to interest rate risk relating to interest bearing borrowings through a target ratio of fixed and variable rate borrowings. To achieve this ratio the Group may borrow at fixed rates or enter into approved derivative financial instruments. The target ratio is a third fixed, a third floating and a third managed, being either fixed or floating.

During the year the interest rate swap agreement terminated, settled on a net basis. Details of the interest rate swap designated as hedging instruments and utilised to swap a portion of the Group's floating interest bearing borrowings to fixed:

	Swap three ¹
Floating interest rate	JIBAR + 1.8%
Fixed interest rate	7.1% NACQ
Notional principal amount (Rm)	1 000
Termination date	30 September 2015

Notes:

1. Swap three relates to the interest bearing borrowings from Old Mutual Specialised Financing (Pty) Limited and Minervois Trading No. 2 (Pty) Limited (Note 18).

Notes to the consolidated annual financial continued

31. Financial instruments and risk management continued

31.4 Financial risk management continued

31.4.1 Market risk management continued

31.4.1.2 Interest rate risk management continued

Interest rate sensitivity analysis

The analysis below, expressed in the Group's presentation currency, discloses the Group's sensitivity to the specified basis point change in the market interest rates exposed to. Management's assessment of a reasonable possible change in market interest rates are based on economic forecasts as published by Bloomberg.

The analysis includes both derivative and non-derivative instruments at the reporting date and in the case of floating rate instruments, the analysis is prepared assuming the amount outstanding at the reporting date was outstanding for the whole year.

A negative number indicates a decrease in profit post tax if interest rates were higher by the specified basis points. If interest rates were lower by the specified basis points, the impact would be equal and opposite. There would be no material impact on equity.

	2016	2015
South African prime, South African BA, JIBAR and South African money market rates		
Basis point increase	25	75
Profit post tax (Rm)	(26)	(83)

A reasonable possible change in the remaining interest rates exposed to, being LIBOR, EURIBOR, Lesotho prime and Tanzanian reference treasury bill rates, would have no material impact on profit post tax.

31.4.1.3 Equity price risk

The Group is only exposed to equity price risk to a small extent and therefore a reasonable possible change in equity prices will not have a material impact on profit post tax.

31.4.2 Credit risk management

Loans receivable, investments, trade and other receivables, derivatives, finance lease receivables, cash and cash equivalents, and financial guarantees granted potentially expose the Group to credit risk.

The carrying amounts of financial assets, which are net of impairment losses, represent the Group's maximum exposure to credit risk, with the exception of financial guarantees granted where the amount the Group could be required to pay or fund, if called on, represents the Group's maximum exposure. The Group considers its maximum exposure per geographical class, without taking into account any collateral and financial guarantees, to be as follows:

Rm	2016	2015
South Africa	17 645	16 861
Non-South African	5 005	4 759
	22 650	21 620

31. Financial instruments and risk management continued

31.4 Financial risk management continued

31.4.2 Credit risk management continued

In addition, the Group holds cash in restricted deposits of R2 454 million (2015: R1 943 million) as a result of its M-Pesa activities, which cash is held in accounts with reputable financial institutions.

The Group's policy is to deal with creditworthy counterparties only and to obtain sufficient collateral, where appropriate, to mitigate the risk of financial loss from counterparty defaults.

The Group only transacts with counterparties rated the equivalent of investment grade and above. This information is supplied by independent rating agencies or credit bureaus, where available. If not available, other publicly available financial information, the financial standing of counterparties, the Group's own trading records or the Group's internal grading system is used for rating the credit quality of counterparties. Contractual arrangements are entered into with network operator customers as determined by regulatory requirements and industry norms. Credit exposure is further controlled by defining credit limits per counterparty which are reviewed and approved by the credit risk department. The Group's exposure and credit ratings of counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. In determining the recoverability of trade receivables, the Group considers changes in credit quality.

The Group's largest customer represents 21.2% (2015: 16.1%) of the total trade receivable balance. With the exception of the aforementioned, the credit risk for trade, finance and other receivables is generally limited due to the customer base being large and unrelated in conjunction with stringent credit approval processes. Due to this management believes there is no further provision required in excess of the normal provision for doubtful receivables. Credit risk is limited for loans receivable due to collateral held and for cash and cash equivalents as they are placed with high credit quality financial institutions. Credit risk relating to investments and derivatives is minimised by limiting the counterparties to major local and international banks, which are closely monitored, and the Group does not expect to incur any losses as a result of non-performance by these counterparties.

The average legally agreed credit period on trade receivables is between 30 and 60 days, for all reporting periods, for the South African operations and between 30 and 85 days, for all reporting periods, for the non-South African operations.

The Group holds collateral to the value of R3 401 million (2015: R3 438 million) over certain trade and other receivables, which is made up of demand guarantees from financial institutions, exercisable on overdue invoices. Collateral held over loans receivable is disclosed in Note 11.

The table below discloses the credit quality of the trade receivables of the Group's South African-based operations which are neither past due nor impaired:

%	2016	2015
High ¹	2.0	0.4
Medium ²	2.8	7.8
Low ³	95.2	91.8
	100.0	100.0

Notes:

1. High: probability of default in payments exists and possible delinquency scenario.

2. Medium: probability of financial difficulties exists resulting in arrears.

3. Low: no default in payment occurred or anticipated.

Notes to the consolidated annual financial continued**31. Financial instruments and risk management** continued**31.4 Financial risk management** continued**31.4.2 Credit risk management** continued

The tables below disclose an analysis of the age of financial assets that are past due but not impaired:

	2016	2015
South Africa		
1 – 30 days past due	217	188
31 – 60 days past due	128	228
61 – 120 days past due	120	209
121 days to 12 months past due	94	217
More than 12 months past due	57	16
	616	858
Non-South African		
1 – 30 days past due	526	384
31 – 60 days past due	116	161
61 – 120 days past due	127	948
121 days to 12 months past due	11	17
More than 12 months past due	5	1
	785	1 511

31. Financial instruments and risk management continued

31.4 Financial risk management continued

31.4.3 Liquidity risk management

The tables below disclose the maturity profile of the Group's non-derivative financial liabilities and those financial assets used for managing liquidity risk. The amounts disclosed are the future undiscounted contractual cash (outflows)/inflows which therefore differ from both the carrying amount and the fair value. The tables have been drawn up based on the earliest date on which the Group can be required to settle or can require settlement and include both estimated interest and principal cash flows. Estimated interest for floating interest rate financial liabilities is calculated with reference to the applicable zero coupon yield curves, at the reporting date, as published by Bloomberg.

Rm	0 – 1 year	2 years	3 years	4 years	5 years	5+ years	Total
2016							
Financial liabilities							
Interest bearing borrowings	(3 006)	(5 324)	(10 899)	(12 667)	(1 809)	(1 305)	(35 010)
Non-interest bearing borrowings	(436)	–	–	–	–	–	(436)
Trade and other payables ¹	(16 546)	(135)	–	–	–	–	(16 681)
Bank overdrafts	(183)	–	–	–	–	–	(183)
	(20 171)	(5 459)	(10 899)	(12 667)	(1 809)	(1 305)	(52 310)
Financial assets							
Trade and other receivables	11 645	–	–	–	–	–	11 645
Cash and cash equivalents	7 934	–	–	–	–	–	7 934
	19 579	–	–	–	–	–	19 579
2015							
Financial liabilities							
Interest bearing borrowings	(5 802)	(1 624)	(4 619)	(4 360)	(12 384)	(2 825)	(31 614)
Non-interest bearing borrowings	(436)	–	–	–	–	–	(436)
Trade and other payables ¹	(14 631)	(81)	–	–	–	–	(14 712)
Bank overdrafts	(380)	–	–	–	–	–	(380)
	(21 249)	(1 705)	(4 619)	(4 360)	(12 384)	(2 825)	(47 142)
Financial assets							
Trade and other receivables	9 789	–	–	–	–	–	9 789
Cash and cash equivalents	9 250	–	–	–	–	–	9 250
	19 039	–	–	–	–	–	19 039

Note:

1. In addition, the Group holds cash in restricted deposits of R2 454 million (2015: R1 943 million) relating to M-Pesa creditors, for which cash is held in accounts with reputable financial institutions.

Notes to the consolidated annual financial continued

31. Financial instruments and risk management continued

31.4 Financial risk management continued

31.4.3 Liquidity risk management continued

The tables below disclose the maturity profile of the Group's derivative financial assets and liabilities which include foreign exchange forward contracts and interest rate swaps. The amounts disclosed are the future undiscounted contractual cash (outflows)/inflows, however, for those derivative financial instruments for which gross settlement has been agreed, the cash outflows are matched in part by cash inflows, which are not reported in the tables below and if reported, the cash flows presented would be substantially lower. In the case of the interest rate swaps, where the amounts payable or receivable are not fixed, the amounts are calculated with reference to the applicable zero coupon yield curves at the reporting date.

Rm	0 – 1 year	2 years	3 years	4 years	5 years	5+ years	Not determinable	Total
2016								
Net settled	(34)	–	–	–	–	–	–	(34)
Gross settled								
Payable	(2 065)	–	–	–	–	–	–	(2 065)
	(2 099)	–	–	–	–	–	–	(2 099)
2015								
Net settled	(281)	–	–	–	–	–	–	(281)
Gross settled								
Payable	(3 289)	–	–	–	–	–	–	(3 289)
	(3 570)	–	–	–	–	–	–	(3 570)

The Group ensures that adequate funds are available to meet its expected and unexpected financial commitments through undrawn borrowing facilities and access to the debt capital market via its recently listed domestic medium-term note programme. At the reporting date the Group had undrawn rand-denominated borrowing facilities of R3 776 million (2015: R3 188 million) and undrawn foreign-denominated borrowing facilities of US\$20 million (2015: US\$58 million), MZN888 million (2015: MZN375 million), LSL25 million (2015: LSL4 million) and NGN Nil (2015: NGN200 million) available to manage its liquidity. The Group uses bank facilities and the normal operating cycle to manage short-term liquidity. The Group raises funds in bank markets and ensures a reasonable balance is maintained between the period over which assets generate funds and the period over which the respective assets are funded to manage long-term liquidity. Liquidity on long-term borrowings is managed by maintaining a varied maturity profile thereby minimising refinancing risk.

31.4.4 Insurance risk management

The Group is exposed to insurance risk as a result of its asset base as well as its customer commitments and value added services rendered. The Group is adequately covered in terms of its insurance risk profile. The annual financial statements of Vodacom Insurance Company (RF) Limited and Vodacom Life Assurance Company (RF) Limited are available at the registered office of the Group and contain further details of the value-added services and insurance risk.

31. Financial instruments and risk management continued

31.5 Capital risk management

The Group finances its operations through a mixture of cash generated from operations, retained earnings, bank and other long-term borrowings. These borrowings together with surplus cash may be loaned internally or contributed as equity to certain subsidiaries.

The capital structure of the Group consists of net debt and equity. The Group manages its capital to ensure that entities within the Group will be able to continue as going concerns while maximising return to shareholders. Capital is monitored on the basis of net debt to EBITDA.

Net debt comprises interest bearing borrowings, non-interest bearing borrowings, derivative financial instruments, bank and cash balances, bank overdrafts and financial guarantees.

EBITDA comprises earnings before interest, taxation, depreciation, amortisation, impairment losses, BBBEE charge, profit/loss on disposal of property, plant and equipment, intangible assets, subsidiaries and investment properties.

The Group's strategy is to maintain a net debt to EBITDA multiple of less than two. The Group's overall strategy remains unchanged from prior reporting periods. This internal ratio establishes levels of debt that the Group should not exceed other than for relatively short periods of time and it is reviewed on a semi-annual basis to ensure it is being met. The Group complied with this ratio throughout the year.

The Group is not subject to externally imposed capital requirements.

The following table summarises the capital of the Group:

Rm	2016	2015
Bank and cash balances	7 934	9 250
Bank overdrafts	(183)	(380)
Borrowings and derivative financial instruments	(29 038)	(25 630)
Net debt	(21 287)	(16 760)
Equity	(23 024)	(21 643)
Capital	(44 311)	(38 403)
EBITDA and the net debt to EBITDA multiple at the reporting date is as follows:		
EBITDA	(30 345)	(26 905)
Net debt/EBITDA (times)	(0.7)	(0.6)

31.6 Option agreements and similar arrangements

31.6.1 VM, SA

Empresa Moçambicana de Telecomunicações SA ('Emotel'), Intelec Holdings Limitada ('Intelec') and Whatana Investments Limitada ('Whatana') each held a call option to acquire shares equivalent to their respective equity interests in VM, SA. The options were exercised on 26 August 2014 and, subject to certain suspensive conditions, the option was classified as an equity instrument at initial recognition.