8. Cash-settled share-based payment arrangements

	Group		Company	
	2017	2016	**2017**	2016
	R'000	R'000	**R'000**	R'000
Cash-settled share-based payment liability				
Balance at beginning of year	**14 220**	6 040	**14 220**	6 040
Share-based payment expense	**5 588**	12 805	**5 588**	12 805
Share grants vested	**(11 053)**	(4 625)	**(11 053)**	(4 625)
Balance at the end of year	**8 755**	14 220	**8 755**	14 220
Current	**3 376**	9 208	**3 376**	9 208
Non-current	**5 379**	5 012	**5 379**	5 012

8.1 Share option/grant schemes

On 14 December 1999 a share incentive scheme was approved by the shareholders as an incentive to employees (including executive directors) of the company and its subsidiaries to identify themselves more closely with the activities of the company and to promote its continued growth by giving them an opportunity of acquiring shares therein. Management has applied the provisions of IFRS 2: Share-based payment in accounting for and disclosing all share options granted, except for share options granted before 7 November 2002, or share options granted after this date, but which had vested prior to 1 January 2005.

On 13 April 2010, a new incentive scheme was approved by the shareholders. Share grants were issued under the new incentive scheme. Refer to note 8.2 for details regarding the share grants.

From inception of the new incentive scheme up until 29 June 2016, the company's intention was to equity settle. The Board took a decision to cash settle, effective 29 June 2016, to avoid dilution of equity, subject to certain conditions.

Share options that had been granted to employees and senior management in prior years which had to be exercised within 10 years of grant date were either exercised or lapsed. The share options that were exercised were settled by cash.

8. Cash-settled share-based payment arrangements *(continued)*

8.1 Share option/grant schemes *(continued)*

The number and weighted average exercise price of share options are as follows:

	2017		2016	
	Weighted average exercise price in cents per share	**Number of options '000**	Weighted average exercise price in cents per share	Number of options '000
Outstanding balance at beginning of year	**139**	**10 908**	144	18 496
Options exercised during the year	**172**	**(8 310)**	82	(3 365)
Options forfeited during the year	**227**	**(2 598)**	127	(4 223)
Outstanding balance at end of year	**-**	**-**	139	10 908
Exercisable at end of year	**-**	**-**	139	10 908

Share options outstanding at the end of the year have the following exercise prices:

	Company	
	2017 '000	2016 '000
69 cents	**-**	3 000
136 cents	**-**	5 310
227 cents	**-**	2 598
	-	10 908

8. Cash-settled share-based payment arrangements *(continued)*

8.1 Share option/grant schemes *(continued)*

	Company	
	2017	2016
	'000	'000
1 March 2011	-	866
1 March 2012	-	1 866
1 March 2013	-	1 866
1 March 2014	-	1 000
1 October 2013	-	885
1 October 2014	-	1 770
1 October 2016	-	1 770
1 October 2017	-	885
	-	10 908

The fair value of services received in return for share options granted is based on the fair value of share options granted, measured using the Black-Scholes-Merton model, with the following inputs :

	2017	2016
	Share options	Share options
Weighted average grant price (cents)	-	139
Exercise price in cents (weighted average)	-	82
Expected volatility*	-	48%
Option life in years	-	5 - 6
Expected dividends	-	12.29%
Risk-free interest rate	-	7.85%
Intrinsic value of shares	-	R4 419 768

*The expected volatility of 48% (2016) is based on historic volatility of the Merafe share price over the past five years.

8.2 Share grants

The new share incentive scheme was approved by shareholders on 13 April 2010. During 2010 to 2017, various share grants and share options were issued to directors and employees of the company.

8. Cash-settled share-based payment arrangements *(continued)*

8.2 Share grants *(continued)*

The purpose of the share incentive scheme is to serve as an incentive and reward to employees (including executive directors) of the company and its subsidiaries for services rendered and to be rendered, aimed at promoting the continued growth of the company by giving employees an opportunity to acquire shares in the company and to serve as a retention mechanism for employees whose services are regarded by the company to be crucial to the future growth and sustainability of the company's business. Share options and share grants are granted by the Board of directors of the company on the recommendation of the Remuneration Committee.

The Black-Scholes Merton option pricing model was used to determine the fair value of the share grants. This valuation methodology is consistent with previous valuation calculations.

The share grants are split between portions being subject to performance conditions and portions with no performance conditions. For share grants issued prior to 2013, 50% of the share grants to directors are subject to performance conditions and 50% are not subject to performance conditions. 20% of the share grants to employees are subject to performance conditions and 80% are not subject to performance conditions for share grants issued prior to 2013.

The following market and non-market conditions relate to the share grants granted to directors and employees prior to 2013:

Vesting condition	Type	Weighting	Three-year option	Four-year option	Five-year option
		%	%	%	%
Capacity growth*	Non-market	25	100	100	100
Assets under management**	Non-market	25	100	100	100
JSE SRI Index***	Non-market	25	100	100	100
JSE Small Capitalisation Index and Mining Index	Market	25	-	-	-

* *The target is to grow ferrochrome capacity cumulatively by 3% (first hurdle), 6% (second hurdle) or 9% (third hurdle)*

** *The target is to grow total assets under management cumulatively by 6% (first hurdle), 12% (second hurdle), or 18% (third hurdle)*

*** *There are no hurdles. The index must be maintained for full incentives or if lost then there is no incentive on this measure. The areas measured under this index relate to environmental sustainability, economic sustainability, social sustainability and corporate governance.*

8. Cash-settled share-based payment arrangements *(continued)*

8.2 Share grants *(continued)*

Note: The capacity growth and assets under management target have three hurdles at which different amounts of the share grants are earned. If the first hurdle is met then 50% of the share grants are earned. If the second hurdle is met when 75% of the share grants are earned and if the third hurdle is met when 100% of the share grants are earned.

The performance conditions include 75% of non-market conditions and 25% of market conditions. The probabilities relating to non-market conditions are estimated by management and will be adjusted each year. Market conditions of outperformance of either the mining index or the JSE small capitalisation index are incorporated using the probability of 62,5% into the initial valuation and are not subsequently adjusted for.

The Remuneration Committee introduced a new performance condition for the share grants granted from 2013 onwards. The performance condition is based on a single performance metric which is Merafe's total shareholder return ("TSR") over a three year period compared to the TSR of a selection of JSE Listed small capitalisation mining and resource companies.

If Merafe's TSR over the three year period places it in one of the top three positions, then the full number of performance granted shares will vest in equal proportions on the 3rd, 4th and 5th anniversaries of their grant. If Merafe's TSR over the three year period places it in 6th position, then one third of the number of performance granted shares will vest in equal proportions on the 3rd, 4th and 5th anniversaries of their grant. If Merafe's performance over the three year period lies between any of the above points, then a prorated number of performance granted shares will vest in equal proportions on the 3rd, 4th and 5th anniversaries of their grant.

The percentage subject to performance conditions and not subject to performance conditions are as follows for each level of staff:

	Not subject to performance conditions	Subject to performance conditions
CEO	30%	70%
Executive Directors	40%	60%
Senior Managers	50%	50%
Other employees	100%	0%

From inception of the new incentive scheme up until 29 June 2016, the company's intention was to equity settle. The Board took a decision to cash settle, effective 29 June 2016, to avoid dilution of equity.

8. Cash-settled share-based payment arrangements *(continued)*

8.2 Share grants *(continued)*

The following assumptions were used in the valuation model:

	2017		2016	
	2015 - 2017 share grants	2013 - 2014 share grants	2013 - 2016 share grants	2010 - 2012 share grants
Risk free rate	7.14%	7.14%	7.85%	7.85%
Expected volatility*	47%	47%	48%	48%
Expected dividend yield	5.48%	5.48%	12.29%	12.29%
Expected life (years)	0.25 – 4.25	0.18 – 1.25	0.99 – 2.78	0.43
Vesting periods (years)	3,4 and 5	3,4 and 5	3,4 and 5	3,4 and 5
Weighted average exercise price (Rands)	0	0	0	0
Weighted average grant price (Rands)	0.77 – 1.67	0.82 – 1.08	0.79 – 0.96	0.81
Weighted average option value (Rands)	0.81 – 1.47	0.79 – 1.48	0.99 – 1.13	1.49
Performance conditions	Yes	Yes	Yes	Yes
Intrinsic value of shares	R15 497 983	R4 409 023	R22 295 614	R3 100 156

*The expected volatility of 47% (2016: 48%) is based on historic volatility of the Merafe share price over the past five years.

The following share grants relating to employees and executive directors were outstanding at 31 December 2017:

Vesting date	Total	Share grant date
06 March 2018	1 114 182	06 March 2013
01 April 2018	922 448	01 April 2014
01 April 2019	922 448	01 April 2014
01 April 2018	1 341 560	01 April 2015
01 April 2019	1 341 560	01 April 2015
01 April 2020	1 341 560	01 April 2015
01 April 2019	1 497 370	01 April 2016
01 April 2020	1 497 370	01 April 2016
01 April 2021	1 497 370	01 April 2016
01 April 2020	733 504	01 April 2017
01 April 2021	733 504	01 April 2017
01 April 2022	733 504	01 April 2017
Total	13 676 380	

8. Cash-settled share-based payment arrangements *(continued)*

8.2 Share grants *(continued)*

The following share grants relating to executive directors were outstanding at 31 December 2017:

Vesting date	**Ms ZJ Matlala**	**Ms K Bissessor**
6 March 2018	759 575	166 600
1 April 2018	626 752	136 182
1 April 2019	626 752	136 182
1 April 2018	850 548	302 337
1 April 2019	850 548	302 337
1 April 2020	850 548	302 337
1 April 2019	941 409	334 634
1 April 2020	941 409	334 634
1 April 2021	941 409	334 634
1 April 2020	460 433	163 665
1 April 2021	460 433	163 665
1 April 2022	460 433	163 665
Total	8 770 249	2 840 872

The movement in the number of share grants can be summarised as follows:

	2017 **'000**	2016 '000
Opening balance	**15 391 374**	15 074 930
Granted during the year	**2 200 513**	4 563 757
Vested during the year	**(3 915 507)**	(4 247 313)
Closing balance	**13 676 380**	15 391 374