

20. Receivables and prepayments (continued)

As at 31 December, the ageing analysis of trade receivables is as follows:

(all amounts in Euro thousands)

	Group		Company	
	2016	2015	2016	2015
Neither past due but not impaired	69,135	56,421	34,651	24,770
Past due nor impaired :				
< 30 days	15,910	11,061	3,213	3,441
30-60 days	7,508	5,539	1,289	2,537
60-90 days	4,867	6,196	1,137	4,185
90-120 days	2,477	3,907	74	1,947
>120 days	23,569	18,832	13,708	8,176
	123,466	101,956	54,072	45,056

The above mentioned trade receivables are secured by guarantees/collaterals, amounting to €27,100 thousand (31.12.2015: €27,819 thousand) for the Group and €10,390 thousand (31.12.2015: €10,716 thousand) for the Company (note 31).

On 31 December 2016, the aforementioned guarantees/collaterals secure effective credit risk of €9,981 thousand (2015: €9,384 thousand) for the Group and €4,748 thousand (2015: €3,779 thousand) for the Company.

Trade receivables and other receivables from related parties are non-interest bearing and are normally settled on 30-170 days for the Group and the Company.

Allowance for doubtful and other debtors analysis

	Group		Company	
	2016	2015	2016	2015
Balance at 1 January	29,850	29,136	4,246	4,466
Charge for the year (note 29)	2,316	3,062	47	276
Unused amounts reversed (note 29)	-2,903	-2,269	-275	-284
Utilized	-905	-774	-490	-212
Reclassification from other receivables/payables	17	71	-	-
Additions due to acquisitions	344	-	-	-
Exchange differences	2	624	-	-
Balance at 31 December	28,721	29,850	3,528	4,246

The individually impaired receivables mainly relate to wholesalers, which are in unexpectedly difficult economic situation. It was assessed that a portion of the receivables is expected to be recovered.

21. Cash and cash equivalents

(all amounts in Euro thousands)

	Group		Company	
	2016	2015	2016	2015
Cash at bank and in hand	245	428	144	281
Short-term bank deposits	179,465	121,305	11,074	8,345
	179,710	121,733	11,218	8,626

Short-term bank deposits comprise primarily of current accounts and time deposits. The effective interest rates on these short-term bank deposits are based on floating rates and are negotiated on a case by case basis.

22. Share capital and premium

(all amounts are shown in Euro thousands unless otherwise stated)

	Group & Company	
	2016	2015
The total number of the authorized ordinary shares is:		
Ordinary shares of €4.00 each	77,063,568	77,063,568
Preference shares of €4.00 each	7,568,960	7,568,960
	84,632,528	84,632,528

22. Share capital and premium (continued)

(all amounts are shown in Euro thousands unless otherwise stated)

	Ordinary shares		Preference shares		Share premium €'000	Total	
	Number of shares	€'000	Number of shares	€'000		Number of shares	€'000
Shares issued and fully paid							
Balance at 1 January 2015	77,063,568	308,254	7,568,960	30,276	22,826	84,632,528	361,356
Balance at 31 December 2015	77,063,568	308,254	7,568,960	30,276	22,826	84,632,528	361,356
Balance at 31 December 2016	77,063,568	308,254	7,568,960	30,276	22,826	84,632,528	361,356

	Ordinary shares		Preference shares		Total	
	Number of shares	€'000	Number of shares	€'000	Number of shares	€'000
Treasury shares						
Balance at 1 January 2015	2,919,912	83,516	5,919	117	2,925,831	83,633
Treasury shares sold	-159,319	-4,556	-	-	-159,319	-4,556
Balance at 31 December 2015	2,760,593	78,960	5,919	117	2,766,512	79,077
Treasury shares purchased	1,219,658	24,265	79,595	928	1,299,253	25,193
Treasury shares sold	-108,574	-2,817	-	-	-108,574	-2,817
Balance at 31 December 2016	3,871,677	100,408	85,514	1,045	3,957,191	101,453

For the year 2016, the average stock price of Titan Cement Company S.A. ordinary shares was €19.63 (2015: €20.40) and the closing price of the ordinary shares on 31 December 2016 was €22.30 (31.12.2015: €17.61).

Share options

Share options are granted to members of senior management. Movements in the number of share options outstanding are as follows:

	2014 scheme	2010 scheme
	Balance at 1 January 2015	250,190
Granted	313,080	-
Exercised	-	-159,319
Non vested	-	-61,112
Cancelled	-4,750	-17,545
Balance at 31 December 2015	558,520	147,233
Granted	303,150	-
Exercised	-	-108,574
Cancelled	-1,650	-38,659
Balance at 31 December 2016	860,020	-

Share options outstanding at the end of the year have the following terms:

Expiration date	2014 scheme		2010 scheme	
	€ 10		€ 4	
	2016	2015	2016	2015
2016	-	-	-	147,233
2020	245,890	247,540	-	-
2021	310,980	310,980	-	-
2022	303,150	-	-	-
	860,020	558,520	-	147,233

22. Share capital and premium (continued)

2010 Programme

On June 3, 2010 the Company approved the introduction of a new, three-year Stock Option Programme (2010 Programme). In the years 2010, 2011 and 2012, executive members of the Company's Board of Directors and senior executives of the Company and its affiliates in Greece and abroad were granted options, vesting of which is subject to the financial results of the Company and the performance of its ordinary share, to acquire up to 1,000,000 ordinary shares of the Company at a sale price equal to the share's nominal value, that is €4.00 per share.

Under this Programme, the options granted each year have a maturity period of three years and can be exercised within two years after the completion of the three year period. Each option must be exercised within the year following the one in which the final number of options that can be exercised is determined. If the deadline is exceeded, those particular options will irrevocably lapse. All vesting is conditional upon the employees' continued employment throughout the vesting period. The number of options that vest each year will be determined as follows:

- 1) One-third of options granted vest based on the financial results of the Company.
- 2) One-third of options granted vest based on Titan Cement's stock performance relative to three Athens Stock Exchange indices during the three year period.
- 3) One-third of options granted vest based on Titan Cement's stock performance relative to that of ten predefined international cement producing companies during the three year period.

The options granted under the 2010 Programme have been accounted for in terms of the requirements of IFRS 2 "Share based payments".

The number of Share Options that were granted during 2010, 2011 and 2012 was 267,720, 301,200 and 376,290 respectively.

The fair value of the options granted in 2010, determined using the Monte Carlo Simulation valuation model, was €5.36 per option. The significant inputs used in the application of the valuation model were share price at grant date of €15.90, standard deviation of share price of 39.42%, dividend yield of 2.68% and the rate of the three-year fixed EUR swap interest rate of 2.25%.

The fair value of the options granted in 2011 was €6.86 per option, determined using the Monte Carlo Simulation valuation model. The significant inputs used in the application of the valuation model were share price at grant date of €17.88, standard deviation of share price of 43.98%, dividend yield of 2.74% and the rate of the three-year fixed EUR swap interest rate of 1.89%.

The fair value of the options granted in 2012 was €3.05 per option, determined using the Binomial Method and the Monte Carlo Simulation valuation model. The significant inputs used in the aforementioned methodology were the share price at grant date of €14.72, the volatility of the share price estimated at 37.4%, the dividend yield of 0.7% and the yield of the 3 year EU Benchmark (Deutsche Bund) Government bond yield rate of 0.32%.

On 31 December 2016, the number of the cancelled share options that were granted during 2010, 2011 and 2012 is 13,380, 17,910 and 16,710 respectively whereas the respective number of the share options that were not vested is 190,746, 118,977 and 61,112.

Out of the share options that were granted during 2010, 8,684 vested and cancelled. The remaining 54,910 share options, that represent 0.06% of Company's total shares of the paid up share capital, were exercised (2013: 50,282 / 2014: 4,628) by 75 Group executives, including 5 executive Board members of the Company. Total purchase cost of common treasury shares of the Company amounted €1,898 thousand (2013: €1,766 thousand / 2014: €132 thousand). The sale price of the Company's common treasury shares (over-the-counter-transaction) equaled to the nominal value of each Company share, i.e. €4.00. The total share price amounted €220 thousand. The loss caused by this transaction amounted to €1,678 thousand (2013: €1,565 thousands / 2014: €113 thousands) and were attributed to the equity holders of the Company.

Out of the share options that were granted during 2011, 15,494 vested and cancelled. The remaining 148,819 share options, that represent 0.17% of Company's total shares of the paid up share capital, were exercised (2014:136,875 / 2015:11,944) by 87 Group executives, including 6 executive Board members of the Company. Total purchase cost of common treasury shares of the Company amounted €4,257 thousand (2014: €3,915 thousand / 2015: €342 thousand). The sale price of the Company's common treasury shares (over-the-counter-transaction) equaled to the nominal value of each Company share, i.e. € 4.00. The total share price amounted € 595 thousand. The loss caused by this transaction amounted to €3,662 thousand (2014: €3,368 thousands / 2015: €294 thousands) and were attributed to the equity holders of the Company.

Out of the share options that were granted during 2012, 42,519 vested and cancelled. Out of the remaining 255,949 share options, that represent 0.3% of Company's total shares of the paid up share capital, were exercised during 2016 and 2015 by 13 and 69 Group executives respectively, including 1 executive Board member of the Company. Total purchase cost of common treasury shares of the Company amounted €7,373 thousand (2015: €4,214 thousand / 2016: €2,817 thousand). The sale price of the Company's common treasury shares (over-the-counter-transaction) equaled to the nominal value of each Company share, i.e. €4.00. The total share price amounted €1,026 thousand (2015: €590 thousand / 2016: €436 thousand). The loss caused by this transaction amounted to €6,005 (2015: €3,624 / 2016: €2,381 thousand) and were attributed to the equity holders of the Company.

22. Share capital and premium (continued)

2014 Programme

On 20 June 2014, the General Meeting approved the introduction of a new, three-year Stock Option Programme. According to this Programme, the Company's Board of Directors can grant option up to 1,000,000 ordinary shares of the Company at a sale price equal to €10.00 per share. Beneficiaries of the Stock Option Plan are the executive members of the Board of Directors of the Company, the managers and the employees who have the same rank in affiliated companies inside and outside Greece and finally a limited number of the other employees who stand out on a continuous basis for their good performance and have a high potential for advancement.

The vesting period of the stock options that were granted in 2014, 2015 and those that will be granted in 2016 shall be three years. Therefore, the relevant option rights shall become mature in December of 2016, 2017 and 2018 respectively, provided that the beneficiaries are still employees of the Group. After the completion of the three-year vesting period, the final option rights number, which the beneficiaries will be entitled to exercise, shall be determined by the Board of Directors, within the first four months of 2017, 2018 and 2019 respectively and shall depend:

- a) By 50% on the average three year Return on Average Capital Employed (ROACE) compared to the target of each year period, as this will be determined by the Board of Directors before granting the relevant option rights.
- b) By 50% on the overall performance of the Company's common share compared to the average overall performance of the shares of the ten predefined international cement producing companies.

The Beneficiaries shall be entitled to exercise their stock option rights, either in whole or in part, within the first five days of each month, paying the Company the relevant amounts until the expiration date of their stock options, i.e. until December of the third year after these stock options have been vested.

The options granted under the 2014 Programme have been accounted for in terms of the requirements of IFRS 2 "Share based payments".

The number of Share Options that were granted during 2014, 2015 and 2016 was 250,190, 313,080 and 303,150 respectively.

The fair value of the options granted in 2014 was €7.39 per option, determined using the Binomial Method and the Monte Carlo Simulation valuation model. The significant inputs used in the aforementioned methodologies were the share price at grant date of €25.32, the employee forfeiture rate 9.2%, the volatility of the share price estimated at 47.2%, the dividend yield of 0.376% and the yield of the 3 year EU Benchmark (Deutsche Bund) Government bond yield rate of 0.083%.

The fair value of the options granted in 2015 was €4.14 per option, determined using the Binomial Method and the Monte Carlo Simulation valuation model. The significant inputs used in the aforementioned methodologies were the share price at grant date of €19.55, the employee forfeiture rate 9.2%, the volatility of the share price estimated at 40.61%, the dividend yield of 0.59% and the yield of the 1 year EURIBOR rate of 0.166%.

The fair value of the options granted in 2016 was €5.17 per option, determined using the Binomial Method and the Monte Carlo Simulation valuation model. The significant inputs used in the aforementioned methodologies were the share price at grant date of €20.38, the employee forfeiture rate 9.2%, the volatility of the share price estimated at 42.80%, the dividend yield of 0.87% and the yield of the 1 year EURIBOR rate of -0.15%.

On 31 December 2016 the number of the cancelled share options that were granted during 2014, 2015 was 4,300 and 2,100 respectively.