

13. Intangible assets and Goodwill

(all amounts in Euro thousands)

<i>Group</i>	Initial goodwill	Goodwill impairment	Total goodwill	Licences	Development expenditure	Trade-marks	Customer relationships	Other intangible assets	Total
Year ended 31 December 2014									
Opening balance	329,236	-6,226	323,010	21,331	340	25,462	33,191	6,502	409,836
Additions	-	-	-	-	32	-	-	534	566
Disposals (NBV)	-	-	-	-	-	-	-	-70	-70
Additions due to acquisition of joint venture (note 30)	3,138	-	3,138	-	-	-	-	-	3,138
Reclassification of assets to/from property, plant & equipment (note 11)	-	-	-	-	-5	-	-	402	397
Reversal of impairment (note 29)	-	-	-	-	-	-	-	738	738
Amortization charge (note 29)	-	-	-	-449	-	-1,591	-5,972	-2,441	-10,453
Exchange differences	31,360	-	31,360	781	1	2,636	2,500	378	37,656
Ending balance	363,734	-6,226	357,508	21,663	368	26,507	29,719	6,043	441,808
Year ended 31 December 2015									
Opening balance	363,734	-6,226	357,508	21,663	368	26,507	29,719	6,043	441,808
Additions	-	-	-	152	54	-	-	682	888
Disposals (NBV)	-	-	-	-	-	-	-	-144	-144
Reclassification of assets to/from property, plant & equipment (note 11)	-	-	-	-	-107	-	-	68	-39
Impairment (note 29)	-	-3,990	-3,990	-	-	-	-	-	-3,990
Amortization charge (note 29)	-	-	-	-561	-	-1,741	-4,604	-1,867	-8,773
Exchange differences	22,888	-	22,888	185	-1	1,537	416	-191	24,834
Ending balance	386,622	-10,216	376,406	21,439	314	26,303	25,531	4,591	454,584

Other intangible assets include mainly computer software.

<i>Company</i>	Trade-marks	Other intangible assets	Total
Year ended 31 December 2014			
Opening balance	81	1,104	1,185
Additions	-	335	335
Disposals (NBV)	-	-7	-7
Reclassification of assets from property, plant & equipment (note 11)	-	197	197
Amortization charge (note 29)	-	-475	-475
Reversal of impairment (note 29)	-	738	738
Ending balance	81	1,892	1,973
Year ended 31 December 2015			
Opening balance	81	1,892	1,973
Additions	-	101	101
Reclassification of assets from property, plant & equipment (note 11)	-	55	55
Amortization charge (note 29)	-	-275	-275
Ending balance	81	1,773	1,854

13. Intangible assets and Goodwill (continued)

Impairment testing of goodwill

Goodwill acquired through business combinations has been allocated to the following cash-generating units ("CGU's") per region of operation.

(all amounts in Euro thousands)

Carrying amount of goodwill (by geographical segment):	2015	2014
Greece and Western Europe	12,719	16,709
North America	200,896	180,162
South Eastern Europe	56,673	56,621
Eastern Mediterranean	106,118	104,016
	376,406	357,508

The provision of goodwill impairment is charged to the income statement.

Key assumptions

The recoverable amount of all CGUs has been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the estimated growth rates stated below.

The calculation of value-in-use for the Group's evaluated CGUs is most sensitive to the following assumptions:

- Sales volumes;
- Selling prices;
- Gross margin;
- Growth rate used to extrapolate cash flows beyond the specific projection period; and
- Discount rates

Sales volumes:

Volume assumptions have been provided by local management and reflect its best estimates as derived from sales forecasts for the development of which a combination of factors have been taken into consideration: past performance, local market growth estimates, infrastructure projects in which the company will participate (public investments), etc. In the USA, sales volume growth rates are also based on published industry research and take into account demographic trends including population growth, household formation, and economic output (among other factors) in the states where the Group operates. In addition to demographic trends, long-term growth rates take into account cement/concrete intensity in construction which has historically varied from state to state based on building codes, availability of raw materials, and other factors.

Selling prices:

Price assumptions have been provided by local management and reflect its best estimates. Factors it had taken into consideration involve inflation, brand loyalty, growth rate of the regional economy, competition, production cost increases, etc. The Group has assumed the following compound annual growth rates for sales for the five year period.

Sales Growth	2015	2014
Greece and Western Europe	5,5% - 27,6%	7,2% - 17,3%
North America	6,8% - 12,2%	11,8% - 15,0%
South Eastern Europe	6,5% - 8,9%	0,8% - 7,5%
Eastern Mediterranean	7.8%	11.0%

13. Intangible assets and Goodwill (continued)

Gross margin :

Illustrates all cost of goods sold related factors and incorporates among others, the evolution of energy cost. The Group has assumed the following gross margin compound annual growth rates for the five year period:

	2015	2014
Gross margin Growth		
Greece and Western Europe	6,2% - 59,6%	8,3% - 18,7%
North America	12,3% - 18,8%	11,5% - 33,9%
South Eastern Europe	11,6% - 24,5%	1,8% - 16,3%
Eastern Mediterranean	28.2%	18.7%

Perpetual growth rates:

Factors that have been taken into consideration are estimates from the local Central Banks in the countries where the Group operates relating to the growth of the local economies over the next years along with the correlation that exists between the growth of the economy and that of the construction sector.

	2015	2014
Perpetual Growth rates		
Greece and Western Europe	3%	3%
North America	3% - 3,5%	3% - 4%
South Eastern Europe	2%	2%
Eastern Mediterranean	3.5%	3.5%

Discount rates:

Discount rates represent the current market assessment of the risks specific to each CGU, taking into consideration the time value of money and individual risks of the underlying assets that have not been incorporated in the cash flow estimates. The discount rate calculation is based on the specific circumstances of the Group and its operating segments and is derived from its weighted average cost of capital (WACC). The WACC takes into account both debt and equity. The cost of equity is derived from the expected return on investment by the Group's investors. The cost of debt is based on the interest bearing borrowings the Group is obliged to service. Country-specific risk is incorporated by applying individual beta factors. The beta factors are evaluated annually based on publicly available market data.

	2015	2014
Discount rates		
Greece and Western Europe	11.6%	12.4%
North America	7.9%	9.1%
South Eastern Europe	6,4%-15,4%	8,1% - 14,4%
Eastern Mediterranean	16.5%	18.7%

Sensitivity of recoverable amounts

As at December 31, 2015, the Group analyzed the sensitivities of the recoverable amounts to a reasonable possible change of a key assumption (notably to a change of one point in the discount rate or the perpetual growth rate). These analyses did not show a situation in which the carrying value of the main CGUs would exceed their recoverable amount, with the exception of the Greece CGU referred to below.

For the CGU Greece, a significant reduction in demand of construction materials due to the persisting economic recession led to the reduced revenues compared to the last year forecasts. As a result, the Group recorded an impairment loss of €4.0 mil. on the goodwill of the Greek CGU, based on the respective value in use as calculated using a discount rate of 11.6% (12.4% in 2014).