6. Goodwill

Figures in Rand thousand	2019	2018
Opening balance	4 255 281	4 625 403
Acquired in business combinations	70 877	340 255
Foreign currency translation	27 874	9 268
Disposals	(325 605)	(634 935)
Impairment: discontinued operations	(506 762)	–
Impairments: continuing operations	(1 348 579)	(84 710)
Current assets held for sale (note 15)	(322 232)	–
Closing balance	1 850 854	4 255 281

The aggregate carrying amounts of goodwill were allocated to the following reporting segments:

iOCO	966 000	1 748 243
NEXTEC	831 544	2 199 902
IP	375 542	307 136
	2 173 086	4 255 281
Current assets held for sale	(322 232)	–
	1 850 854	4 255 281

A number of economic, operational and negative events during the year ended 31 July 2019 had a significant negative impact on EOH's market capitalisation and certain underlying businesses. The Group has also gone through a review of its strategy which impacted CGU allocations. This, combined with the sale and discontinuation of certain non-core business activities, has resulted in a material impact on the carrying value of goodwill. The Group performed a review of goodwill for impairment, which highlighted impairments of R1 855 million (R613 million in the iOCO segment and R1 242 million in the NEXTEC segment).

Strategic changes, combined with further refinement of the operational structures and a rigorous and in-depth analysis having been performed of the CGUs, resulted in the identification of CGUs at a lower level of the Group structure ("Third level" segmentation). As a result, the aggregation of assets for identifying these CGUs has changed.

iOCO

The impairments to goodwill in iOCO relate mainly to EOH's public sector-focused ERP businesses. Goodwill amounting to R198 million across a number of CGUs was impaired due to continued project complexities, slow debtor recoveries and the impact of no further large ERP projects on the continuing outsourcing business.

A further R116 million in impairments in this segment were driven by lost or delayed contracts and projects as a result of the reputational damage sustained by EOH.

Goodwill relating to iOCO International CGUs was impaired by R114 million driven mainly by weaker cash conversion and project delivery difficulties in the Middle East and European entities.

The balance of the iOCO impairments relates to a number of CGUs which have been negatively impacted by challenging market conditions.

6. Goodwill continued

NEXTEC

The industrial technologies division of NEXTEC sustained a number of impairments as detailed below:

- The rail transport technologies' CGU was impaired by R146 million, due to continuing difficulties in completing active contracts and ongoing delays in starting new contracts which have driven continued underperformance against budgets.
- Despite project awards and sign-off for various REIPP projects in the energy sector (electricity generation), there have been continued delays in project launch and completion of transmission and distribution projects both in South Africa and Mozambique, resulting in an impairment of R196 million in energy-related CGUs.
- CGUs providing water infrastructure solutions continue to be impacted by project kick-off delays on projects in hand, as well as new project awards as a result of public sector funding and administrative issues, which have resulted in continued underperformance to budgets and impairments of R131 million.
- Margins within the digital infrastructure businesses have also been negatively impacted by original equipment manufacturers opting to sell directly to customers, resulting in a drop in revenue and margin as well as an impairment of R90 million to goodwill.
- Impairments of R55 million relate to certain non-core CGUs that are held for sale.

The business process outsourcing division of NEXTEC sustained a number of impairments as detailed below:

- A number of CGUs which provide employee services, were impacted by the 2018 High Court ruling related to temporary staffing. This resulted in decreased revenue and reduced margins, driving impairments of R117 million.
- Changes in US legislation governing clinical trials resulted in a loss of customers in the outsourced clinical trials business. This has impacted the earnings forecast and profitability levels resulting in an impairment of R95 million.
- Impairments of R67 million relate to certain non-core CGUs that are held for sale.
- Inability to maintain and secure customer contracts contributed to R63 million of the impairment recognised.

The balance of the NEXTEC impairments relate to a number of CGUs impacted by the negative events and challenging South African market conditions, resulting in further impairments.

Impairment testing

For the purpose of impairment testing, goodwill is allocated to the Group's cash-generating units. The recoverable amount of these cash-generating units was determined based on value-in-use calculations, discounting the future cash flows expected to be generated from the continuing operations of each cash-generating unit. Impairment tests on assets held for sale were based on fair value less costs of disposal. Cash-generating units have been identified to reflect the various solution clusters in EOH based on the strategic review of the Group. Comparatives have been aligned to this structure.

Key assumptions used in discounted cash flow projection calculations

The assumptions below have been applied to calculate the recoverable amount of cash-generating units based on a level 3 fair value less costs of disposal calculation. The discount rates used in the discounted cash flow models are calculated using the principles of the capital asset pricing Model, taking into account current market conditions.

A pre-tax weighted-average cost of capital rate was used in discounting the projected cash flows depending on the nature of business and operating markets (including country specific factors). The cash flow projections were based on 2020 budgeted results and a reasonable growth rate applied for a further four years based on market conditions and historic trends. A perpetuity growth rate was applied based on conservative historical market trends and operating markets (including country specific factors). The rates ranged between:

	iOCO		NEXTEC	
	2019	2018	2019	2018
Pre-tax weighted average cost of capital rate*	19,5% – 24,1%	17,7% – 19,8%	19,0% – 23,7%	18,2% – 20,4%
Perpetuity growth rate*	3,9%	4,5%	3,9%	4,5%

** These ranges exclude international rates.*

The values assigned to the key assumptions represent management's assessment of future trends in the industry and are based on past experience and both external and internal data.

Changes in key assumptions, as well as the actual cash flows achieved against forecasts, may result in further impairments to the cash-generating units impaired during the year ended 31 July 2019. The forecast cash flows of these CGUs are reliant on a certain level of anticipated improvement within the forecast period.

6. Goodwill continued

Sensitivity analysis on fair value less costs of disposal

In performing the impairment test for goodwill, EOH considered the sensitivity of the EOH CGUs to changes in assumptions around key value drivers. The key value drivers for the EOH CGUs are EBIT margins, discount rates and revenue growth assumptions. A sensitivity analysis was performed by decreasing the key value drivers by one percentage point, resulting in the following CGUs no longer having adequate headroom:

	Absolute change to discount rate %	Absolute change in EBIT margin %
NEXTEC		
Hospitality Professionals SA	6,6%	10,5%
Impact Human Resources	N/A	16,8%
Energy management	N/A	12,6%

CGUs not disclosed in the table above have sufficient headroom to absorb the changes in assumptions made in our sensitivities.

7. Equity-accounted investments

Figures in Rand thousand	2019	Restated* 2018
Opening balance	530 861	847 917
Additions***	190 454	–
Dividends received	–	(3 638)
Foreign currency translation	(83 304)	(60 298)
Foreign currency translation recognised in profit or loss	94 547	–
Disposals**	(146 460)	–
Capital contribution	3 243	–
Impairment: Continuing operations	(146 500)	–
Impairment: Discontinued operations	(121 405)	(301 343)
Share of equity-accounted losses continuing operations	(9 814)	(463)
Share of equity-accounted (losses)/profit discontinued operations	(11 087)	48 686
Current assets held for sale (note 15)	(72 468)	–
Closing balance	228 067	530 861

* *Refer to note 3 for further information regarding the restatement of the prior year.*

** *Refer to note 8 for further information regarding the change of control in the TTCS Group.*

*** *EOH Mthombo sold 70% of its wholly owned subsidiary Construction Computer Software (CCS) for an amount of R444 million to RBI Limited, a subsidiary of German-listed RIB Software SE (RIB) as at 31 July 2019. EOH retains a 30% shareholding in CCS, and will be able to participate in CCS expansion and growth. The change in shareholding is reflected as an addition to equity investments, the entity was formerly recognised as a subsidiary.*

As part of the Group's strategy to exit from non-core operations, a number of equity-accounted investments have been classified as held for sale.

Equity accounted investments have been impaired by R268 million

- R75 million of the impairments relate to EOH's investments in Turkey as a result of increased levels of political and macro-economic risk causing delays in project kick-offs and a deterioration in cash recovery rates.
- Margin erosion, deterioration in pipeline and reduced cash conversion rates triggered an impairment of R151 million in EOH's South American-based ERP utilities investment.
- Impaired equity-accounted investments form part of the iOCO segment. The recoverable amount was based on fair value less cost of disposal.