

Cubic Mission Solutions

	Fiscal 2019	Fiscal 2018	% Change
	(in millions)		
Sales	\$ 328.8	\$ 207.0	59 %
Operating income (loss)	7.8	(0.1)	n/a
Adjusted EBITDA	34.4	26.2	31

Sales: CMS sales increased 59% to \$328.8 million in fiscal 2019 compared to \$207.0 million in 2018. The increase in sales resulted from increased product deliveries in all of our CMS product lines, and particularly expeditionary satellite communications products and secure network products. Businesses acquired during fiscal years 2019 and 2018 whose operations are included in our CMS operating segment had sales of \$8.9 million and \$0.6 million for fiscal years 2019 and 2018, respectively.

Amortization of Purchased Intangibles: Amortization of purchased intangibles included in the CMS results amounted to \$19.5 million in 2019 and \$20.8 million in 2018.

Operating Income: CMS had operating income of \$7.8 million in 2019 compared to an operating loss of \$0.1 million in 2018. The improvement in operating results was primarily from higher sales from expeditionary satellite communications products and secure networks products. The improvements in operating profits was partially offset by operating losses incurred by businesses that CMS acquired during fiscal 2019 and 2018. Businesses acquired by CMS in fiscal years 2019 and 2018 incurred operating losses of \$12.8 million in fiscal 2019 compared to \$3.5 million in fiscal 2018. Included in the operating loss incurred by acquired businesses are acquisition transaction costs of \$1.6 million and \$1.0 million incurred in fiscal years 2019 and 2018, respectively. In addition, the increase in operating profits was partially offset by an increase of \$4.4 million in R&D expenditures from fiscal 2018 to fiscal 2019 related primarily to the development of secure communications and ISR-as-a-service technologies.

Adjusted EBITDA: CMS Adjusted EBITDA increased 31% to \$34.4 million in 2019 compared to \$26.2 million in 2018. The increase in CMS Adjusted EBITDA was primarily due to the same factors that drove the increase in operating income described above, excluding the changes in amortization expense and acquisition transaction costs as such items are excluded from Adjusted EBITDA. Adjusted EBITDA for CMS increased by \$0.5 million in 2019 as a result of the adoption of the new revenue recognition standard. The increase in Adjusted EBITDA was partially offset by the increase in R&D expenditures described above.

Cubic Global Defense

	Fiscal 2019	Fiscal 2018	% Change
	(in millions)		
Sales	\$ 317.9	\$ 325.2	(2)%
Operating income	23.0	16.6	39
Adjusted EBITDA	32.8	26.3	25

Sales: CGD sales decreased 2% to \$317.9 million in 2019 compared to \$325.2 million in 2018. The timing of sales recognition was impacted by the adoption of ASC 606. Under ASC 606, a number of our CGD contracts, most significantly in air combat training and ground live training, for which revenue was historically recorded upon delivery of products to the customer, are now accounted for on the percentage-of-completion cost-to-cost method of revenue recognition. For fiscal 2019, sales were lower from air combat training systems, simulation product development contracts, and international services contracts, partially offset by higher sales from ground combat training systems. The average exchange rates between the prevailing currencies in our foreign operations and the U.S. dollar resulted in a decrease in CGD sales of \$3.2 million for 2019 compared to 2018.