UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the quarterly period ended March 31, 2019

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from _________ to _________

Commission File Number: 001-32358

SPOK HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	**16-1694797**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
6850 Versar Center, Suite 420 **Springfield, Virginia**	**22151-4148**
(Address of principal executive offices)	**(Zip Code)**

(800) 611-8488
(Registrant's telephone number, including area code)

N/A
(Former name, former address and former fiscal year if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

19,212,090 shares of the registrant's common stock ($0.0001 par value per share) were outstanding as of April 19, 2019.

SPOK HOLDINGS, INC.

QUARTERLY REPORT ON FORM 10-Q

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PART I. FINANCIAL INFORMATION

ITEM 1. *CONDENSED CONSOLIDATED FINANCIAL STATEMENTS*

SPOK HOLDINGS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands)	March 31, 2019	December 31, 2018
ASSETS	**(Unaudited)**	
Current assets:		
Cash and cash equivalents	$ 62,927	$ 83,343
Short-term investments	18,868	3,963
Accounts receivable, net	36,721	32,386
Prepaid expenses and other	8,666	9,578
Inventory	1,436	1,708
Total current assets	128,618	130,978
Non-current assets:		
Property and equipment, net	9,823	10,354
Operating lease right-of-use assets	16,965	—
Goodwill	133,031	133,031
Intangible assets, net	4,792	5,417
Deferred income tax assets	45,967	46,484
Other non-current assets	1,406	1,448
Total non-current assets	211,984	196,734
Total assets	$ 340,602	$ 327,712
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,358	$ 2,010
Accrued compensation and benefits	9,158	11,348
Accrued taxes	1,812	1,822
Deferred revenue	28,091	26,106
Operating lease liabilities	5,286	—
Other current liabilities	2,845	3,662
Total current liabilities	50,550	44,948
Non-current liabilities:		
Asset retirement obligations	6,615	6,513
Deferred revenue	470	476
Operating lease liabilities	12,204	—
Other non-current liabilities	229	1,221
Total non-current liabilities	19,518	8,210
Total liabilities	70,068	53,158
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Preferred stock	$ —	$ —
Common stock	2	2
Additional paid-in capital	88,266	90,559
Accumulated other comprehensive loss	(1,361)	(1,301)
Retained earnings	183,627	185,294
Total stockholders' equity	270,534	274,554
Total liabilities and stockholders' equity	$ 340,602	$ 327,712

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

SPOK HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Unaudited and in thousands except share and per share amounts)	For the Three Months Ended March 31, 2019	2018
Revenue:		
Wireless	$ 22,610	$ 24,269
Software	19,154	18,845
Total revenue	41,764	43,114
Operating expenses:		
Cost of revenue	7,592	7,878
Research and development	6,167	5,735
Technology operations	7,674	7,750
Selling and marketing	6,110	6,490
General and administrative	10,747	11,964
Depreciation, amortization and accretion	2,359	2,713
Total operating expenses	40,649	42,530
Operating income	1,115	584
Interest income	449	283
Other expense	(236)	(47)
Income before income taxes	1,328	820
Income tax expense	(586)	(475)
Net income	$ 742	$ 345
Basic and diluted net income per common share	$ 0.04	$ 0.02
Basic weighted average common shares outstanding	19,196,970	20,027,800
Diluted weighted average common shares outstanding	19,356,712	20,153,291
Cash dividends declared per common share	$ 0.125	$ 0.125

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

SPOK HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	For the Three Months Ended March 31,	
	2019	2018
(Unaudited and in thousands)		
Net income	$ 742	$ 345
Other comprehensive loss, net of tax:		
Foreign currency translation adjustments	(60)	(256)
Other comprehensive loss	(60)	(256)
Comprehensive income	$ 682	$ 89

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

SPOK HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(Unaudited and in thousands except share amounts)	Outstanding Common Shares	Common Stock	Additional Paid-In Capital & Accumulated Other Comprehensive Loss	Retained Earnings	Total Stockholders' Equity
Balance, January 1, 2018	20,135,514	$ 2	$ 98,731	$ 191,796	$ 290,529
Net income	—	—	—	345	345
Adjustment to beginning balance resulting from adoption of ASC 606 and tax impact	—	—	—	4,644	4,644
Purchase of common stock for tax withholding	(56,269)		(892)	—	(892)
Amortization of stock-based compensation			1,234	—	1,234
Cash dividends declared	—	—	—	(2,589)	(2,589)
Common stock repurchase program including commissions	(127,792)	—	(1,927)	—	(1,927)
Issuance of restricted stock under the Equity Plan and other	4,812	—	—	—	—
Cumulative translation adjustment	—	—	(256)	—	(256)
Balance, March 31, 2018	19,956,265	$ 2	$ 96,890	$ 194,196	$ 291,088
Balance, January 1, 2019	19,389,066	$ 2	$ 89,258	$ 185,294	$ 274,554
Net income	—	—	—	742	742
Purchase of common stock for tax withholding	(67,648)	—	(1,011)	—	(1,011)
Amortization of stock-based compensation	—	—	528	—	528
Cash dividends declared	—	—	—	(2,479)	(2,479)
Common stock repurchase program including commissions	(131,012)	—	(1,810)	—	(1,810)
Issuance of restricted stock under the Equity Plan and other	13,650	—	—	70	70
Cumulative translation adjustment	—	—	(60)	—	(60)
Balance, March 31, 2019	19,204,056	$ 2	$ 86,905	$ 183,627	$ 270,534

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

SPOK HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Three Months Ended March 31,	
(Unaudited and in thousands)	**2019**	**2018**
Cash flows provided by operating activities:		
Net income	$ 742	$ 345
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, amortization and accretion	2,359	2,713
Deferred income tax expense	517	475
Stock-based compensation	528	1,234
Provision for doubtful accounts, service credits and other	374	628
Adjustment of non-cash transaction taxes	—	(53)
Changes in assets and liabilities:		
Accounts receivable	(4,791)	(4,106)
Prepaid expenses, inventory, and other assets	(15,515)	(1,215)
Accounts payable, accrued liabilities and other	15,206	(2,182)
Deferred revenue	1,803	3,106
Net cash provided by operating activities	1,223	945
Cash flows used in investing activities:		
Purchase of property and equipment	(1,287)	(1,164)
Purchase of short-term investments	(14,824)	—
Net cash used in investing activities	(16,111)	(1,164)
Cash flows used in financing activities:		
Cash distributions to stockholders	(2,647)	(2,740)
Purchase of common stock (including commissions)	(1,810)	(1,927)
Purchase of common stock for tax withholding on vested equity awards	(1,011)	(892)
Net cash used in financing activities	(5,468)	(5,559)
Effect of exchange rate on cash	(60)	(256)
Net decrease in cash and cash equivalents	(20,416)	(6,034)
Cash and cash equivalents, beginning of period	83,343	103,179
Cash and cash equivalents, end of period	$ 62,927	$ 97,145
Supplemental disclosure:		
Income taxes paid	$ 80	$ 50

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

NOTE 1 - ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

Spok Holdings, Inc. (NASDAQ: SPOK) ("Spok," "we," "our" or the "Company") through its wholly-owned subsidiary Spok, Inc., is the global leader in healthcare communications. We deliver clinical information to care teams when and where it matters most to improve patient outcomes. Top hospitals rely on the Spok Care Connect platform to enhance workflows for clinicians, support administrative compliance, and provide a better experience for patients. Our customers send over 100 million messages each month through their Spok solutions.

We offer a focused suite of unified clinical communications and collaboration solutions that include call center operations, clinical alerting and notifications, one-way and advanced two-way wireless messaging services, mobile communications and public safety solutions.

We provide one-way and advanced two-way wireless messaging services including information services throughout the United States. These services are offered on a local, regional and nationwide basis employing digital networks. One-way messaging consists of numeric and alphanumeric messaging services. Numeric messaging services enable subscribers to receive messages that are composed entirely of numbers, such as a phone number, while alphanumeric messages may include numbers and letters, which enable subscribers to receive text messages. Two-way messaging services enable subscribers to send and receive messages to and from other wireless messaging devices, including pagers, mobile devices and personal computers. We also offer voice mail, personalized greeting, message storage and retrieval, and equipment loss and/or maintenance protection to both one-way and two-way messaging subscribers. These services are commonly referred to as wireless messaging and information services.

We also develop, sell and support enterprise-wide systems for hospitals and other organizations needing to automate, centralize and standardize clinical communications and collaboration. These solutions are used for contact centers, clinical alerting and notification, mobile communications and messaging and for public safety notifications. These areas of market focus complement the market focus of our wireless services outlined above. These products and services are commonly referred to as software solutions and services.

Basis of Presentation

The accompanying Condensed Consolidated Financial Statements include our accounts and the accounts of our wholly-owned direct and indirect subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. Our Condensed Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) and the rules and regulations of the United States Securities and Exchange Commission (the “SEC”). In management's opinion, the unaudited Condensed Consolidated Financial Statements include all adjustments and accruals that are necessary for the presentation of the results of all interim periods reported herein and all such adjustments are of a normal, recurring nature. As a result of the adoption of Accounting Standards Codification (“ASC”) 842, *Leases*, and our application of the modified retrospective approach using a cumulative-effect adjustment to our opening balance of retained earnings as of January 1, 2019, prior period amounts have not been restated under ASC 842. For additional details refer to Note 4, "Significant Accounting Policies Update" and Note 6, "Leases".

Amounts shown on the Condensed Consolidated Statement of Operations within the operating expense categories of Cost of revenue; Research and development; Technology operations; Selling and marketing; and General and administrative are recorded exclusive of depreciation, amortization and accretion.

The financial information included herein, other than the Condensed Consolidated Balance Sheet as of December 31, 2018, is unaudited. The Condensed Consolidated Balance Sheet at December 31, 2018 has been derived from, but does not include all, the disclosures contained in the audited Consolidated Financial Statements as of and for the year ended December 31, 2018.

These Condensed Consolidated Financial Statements should be read in conjunction with the Consolidated Financial Statements and accompanying notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 (the “2018 Annual Report”). The Condensed Consolidated Statement of Operations for the interim periods presented are not necessarily indicative of the results that may be expected for a full year.

Certain prior period amounts in the Condensed Consolidated Financial Statements have been reclassified to conform to the current period's presentation. For additional information refer to the 2018 Annual Report.

Use of Estimates

The preparation of these Condensed Consolidated Financial Statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. On an on-going basis, we evaluate estimates and assumptions, including, but not limited to, those related to the impairment of long-lived assets; intangible assets subject to amortization and goodwill; accounts receivable allowances; revenue recognition; determining standalone selling price ("SSP") of performance obligations; variable consideration; depreciation expense; asset retirement obligations; and income taxes. We base our estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

NOTE 2 - RISKS AND OTHER IMPORTANT FACTORS

See “Item 1A. Risk Factors” of Part II of this Quarterly Report on Form 10-Q (“Quarterly Report”) and "Item 1A. Risk Factors" of Part I of the 2018 Annual Report, which describe key risks associated with our operations and industry.

NOTE 3 - RECENT ACCOUNTING STANDARDS

Recently Adopted

Leases - In February 2016, the FASB issued ASU No. 2016-02, *Leases*. The new standard establishes a right of use (“ROU”) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than twelve months. Leases will be classified as either financing or operating with the classification affecting the pattern of expense recognition in the Condensed Consolidated Statement of Operations.

On January 1, 2019, we adopted ASC 842 using the modified retrospective approach that resulted in a material adjustment to our balance sheet as of January 1, 2019. As a result, the impact was an increase to assets and liabilities of approximately $17.4 million. Results for reporting periods beginning after January 1, 2019 are presented under ASC 842, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under ASC 840. In adoption of ASC 842 we elected to use the package of available practical expedients with the exception of hindsight. For additional details refer to Note 4, "Significant Accounting Policies Update" and Note 6, "Leases."

NOTE 4 - SIGNIFICANT ACCOUNTING POLICIES UPDATE

Our significant accounting policies are detailed in Note 1 “Organization and Significant Accounting Policies” of the 2018 Annual Report. Significant changes to our accounting policies as a result of adopting ASC 842 are discussed below:

Leases - Adoption of ASC 842 “Leases”

Operating lease ROU assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. We have made an accounting policy election not to apply the recognition requirements of ASC 842 to short-term leases. Those leases which have a term of less than 12 months will have lease payments recognized, in our Condensed Consolidated Statement of Operations, on a straight-line basis over the lease term. An optional renewal or termination is not recognized as part of the lease term unless we determine that it is reasonably certain that we will exercise that option. The term reasonably certain is a high threshold for which pervasive evidence generally does not exist, and therefore, optional renewal periods are generally excluded from our ROU assets and lease liabilities until they have been exercised. Lease expense is recognized on a straight-line basis over the lease term.

As most of our leases do not provide an implicit rate, we use an estimated incremental borrowing rate in determining the present value of lease payments. The Company uses a portfolio approach when determining the discount rate to be applied to its leases. Significant judgment is necessary when determining a discount rate because we must estimate the discount rate based on a number of factors and observable inputs including current market conditions, market yields, government bonds or currency LIBOR rates, credit risk, and other factors as necessary. The Company must also exercise significant judgment when determining whether an option to renew or terminate a lease should be included in the lease term. This judgment includes an assessment of all relevant economic factors such as costs relating to the termination or extension of a lease, importance of the underlying asset to the Company’s operations, and the terms and conditions of the optional periods in relation to current market rates.

Where we have lease agreements which contain lease and non-lease components, we have elected to make use of the practical expedient to account for each separate lease component and associated non-lease component as a single lease component.

NOTE 5 - REVENUE, DEFERRED REVENUE AND PREPAID COMMISSIONS

Wireless Revenue

Wireless revenue consists of two primary components: Paging revenue and product and other revenue. Paging revenue consists primarily of recurring fees associated with the provision of messaging services and fees for paging devices and is net of a provision for service credits. Product and other revenue reflects system sales, the sale of devices and charges for paging devices that are not returned and are net of anticipated credits. Our core offering includes subscriptions to one-way or two-way messaging services for a periodic (monthly, quarterly, semiannual, or annual) service fee. This is generally based upon the type of service provided, the geographic area covered, the number of devices provided to the customer and the period of commitment. A subscriber to one-way messaging services may select coverage on a local, regional or nationwide basis to best meet their messaging needs. Two-way messaging is generally offered on a nationwide basis. In addition, subscribers either contract for a messaging device from us or they own a device, having purchased it either from us or from another vendor. We also sell devices to resellers who lease or resell devices to their subscribers and then sell messaging services utilizing our networks. We offer ancillary services, such as voicemail and equipment loss or maintenance protection, which help increase the monthly recurring revenue we receive along with these traditional messaging services. We also offer encryption for one-way and two-way alphanumeric pagerswhich utilize AES-128 bit encryption, screen locking and remote wipe capabilities. With encryption enabled these pagers can add Health Insurance Portability and Accountability Act ("HIPAA") security capabilities to the low cost, highly reliable and availability benefits of paging. (See Item 1. "Business," in the 2018 Annual Report for more details.)

Software Revenue

Software revenue consists of two primary components: operations revenue and maintenance revenue. Operations revenue consists primarily of license revenues for our healthcare communications solutions, equipment revenues that facilitate the use of our software solutions, and professional services revenue related to the implementation of our solutions. Maintenance revenue is for ongoing support of our software solutions or related equipment (typically for one year).

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services. Our software licenses and hardware are generally recognized at a point in time when we have transferred control to the customer. For software licenses, revenue is not recognized until the related license(s) has been made available to the customer and the customer can begin to benefit from its right to use the license(s). Our software licenses represent a right to use Spok's IP as it exists at a point in time at which the license is granted. Many of our software licenses have significant standalone functionality due to their ability to process a transaction or perform a function or task, and we do not need to maintain those products, once provided to the customer, for value to exist. While the functionality of IP that we license may substantively change during the license period, customers are not contractually or practically required to update their license as a result of those changes. Our wireless, professional and maintenance services are generally recognized over time due to a customer's simultaneous receipt and consumption of the benefit as we perform the work. As we transfer control over time, we recognize revenue based on the extent of progress towards completion of the performance obligation. The selection of the method to measure progress towards completion requires significant judgment and is based on the nature of the products or services to be provided. Generally, we use the time-elapsed measure of progress for performance obligations which include wireless or maintenance services. We believe this method best depicts the simultaneous transfer and consumption of the benefit based on our performance as these services are generally considered standby services. For professional services, we leverage an input methodology based on the number of hours worked on a project versus the total expected hours necessary to complete the project. Revenues are recognized proportionally as hours are incurred.

The following table presents our revenues disaggregated by revenue type:

	For the Three months ended March 31, 2019	
(Dollars in thousands)	**2019**	**2018**
Wireless products and services	$ 22,610	$ 24,269
License	2,840	4,376
Services	5,206	4,071
Hardware	963	1,024
Maintenance	10,145	9,374
Total revenue	$ 41,764	$ 43,114

The U.S. was the only country that accounted for more than 10% of the Company's total revenue for the three months ended March 31, 2019 and 2018. Revenue by geographic region consisted of the following for the periods stated:

	For the Three months ended March 31, 2019	
(Dollars in thousands)	**2019**	**2018**
Revenue		
United States	$ 39,766	$ 41,935
International	1,998	1,179
Total revenue	$ 41,764	$ 43,114

Deferred Revenues

Our deferred revenues represent payments made to, or due from, customers in advance of our performance. Changes in the balance of total deferred revenue during the three months ended March 31, 2019 are as follows:

(Dollars in thousands)	**December 31, 2018**	**Additions**	**Revenue Recognized**	**March 31, 2019**
Deferred Revenue	$ 26,582	$ 26,126	$ (24,147)	$ 28,561

During the three months ended March 31, 2019, the Company recognized $15.8 million related to amounts deferred as of December 31, 2018.

Prepaid Commissions

Our prepaid commissions represent payments made to employees in advance of our performance on the related underlying contracts. These costs have been incurred directly in relation with obtaining a contract. As such, these costs are amortized over the estimated period of benefit. Changes in the balance of total deferred commissions during the three months ended March 31, 2019 are as follows:

(Dollars in thousands)	**December 31, 2018**	**Additions**	**Commissions Recognized**	**March 31, 2019**
Prepaid Commissions	$ 2,394	$ (1,553)	$ 1,424	$ 2,265

Deferred commissions are included within Prepaid Assets on the Condensed Consolidated Balance Sheets and commissions expense is included within Selling and marketing on the Condensed Consolidated Statement of Operations.

Remaining Performance Obligations

We have elected not to disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less and for variable consideration which is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation. The remaining backlog is immaterial to our Condensed Consolidated Financial Statements.

NOTE 6 - Leases

Leases - Adoption of ASC 842 "Leases"

We have operating lease arrangements for corporate offices, cellular towers, storage units and small building space. The building space is used to house infrastructure, such as transmitters, antennae and other various equipment, for the Company's wireless paging services. For leases with a term of 12 months or less, renewal terms are generally of an evergreen nature (either month-to-month or year-to-year). For leases with a term greater than 12 months, renewal terms are generally explicit and provide for one to five optional renewals consistent with the initial term. Many of our leases, with the exception of those for our corporate offices, include options to terminate the lease within one year. Variable lease payments, residual value guarantees or purchase options are not generally present in these leases.

Lease costs are included in technology operations and general and administrative expenses on the Condensed Consolidated Statement of Operations. The following table presents lease costs disaggregated by type:

	For the Three months ended March 31,	
(Dollars in thousands)	**2019**	
Operating lease cost	$	1,381
Short-term lease cost		1,935
Short-term lease cost - related party [(1)]		902
Total lease	$	4,218
Supplemental Disclosure:		
Cash paid for amounts included in the measurement of lease liabilities - operating leases	$	1,362
Weighted-average remaining lease term - operating leases		6.01 years
Weighted-average discount rate - operating leases		5.5%

[(1)] A member of our Board of Directors also serves as a director for an entity that leases transmission tower sites to the Company. Refer to Note 13, "Related Parties" for additional details.

Maturities of lease liabilities as of March 31, 2019 were as follows:

For the Year Ended December 31,	**(Dollars in thousands)**	
For the remaining nine months ending December 31, 2019	$	4,075
2020		4,624
2021		3,588
2022		2,089
2023		1,440
Thereafter		4,625
Total future lease payments		20,441
Imputed interest		(2,951)
Total		17,490

NOTE 7 - CONSOLIDATED FINANCIAL STATEMENT COMPONENTS

Depreciation, Amortization and Accretion

Depreciation, amortization and accretion expenses consisted of the following for the periods stated:

	For the Three Months Ended March 31,	
(Dollars in thousands)	2019	2018
Depreciation		
Leasehold improvements	$ 24	$ 68
Asset retirement costs	(192)	(76)
Paging and computer equipment	1,666	1,855
Furniture, fixtures and vehicles	98	106
Total depreciation	1,596	1,953
Amortization	625	625
Accretion	138	135
Total depreciation, amortization and accretion expense	$ 2,359	$ 2,713

Accounts Receivable, Net

Accounts receivable was recorded net of an allowance of $1.5 million and $1.7 million at March 31, 2019 and December 31, 2018, respectively. Accounts receivable, net includes $3.4 million and $8.7 million of unbilled receivables at March 31, 2019 and December 31, 2018, respectively. Unbilled receivables are defined as the Company's right to consideration in exchange for goods or services that we have transferred to the customer but have not yet billed for, generally as a result of contractual billing terms. The decrease in unbilled receivables was primarily due to an increase in billings for the three months ended March 31, 2019.

Property and Equipment, Net

Property and equipment, net consisted of the following as of the date stated:

(Dollars in thousands)	Useful Life (In Years)	March 31, 2019	December 31, 2018
Leasehold improvements	shorter of useful life or lease term	$ 3,708	$ 4,139
Asset retirement costs	1-5	2,024	2,021
Paging and computer equipment	1-5	98,340	98,401
Furniture, fixtures and vehicles	3-5	4,358	4,353
Total property and equipment		108,430	108,914
Accumulated depreciation		(98,607)	(98,560)
Total property and equipment, net		$ 9,823	$ 10,354

NOTE 8 - INTANGIBLE ASSETS, NET

Intangible Assets

Amortizable intangible assets at March 31, 2019 related primarily to customer relationships that resulted from our acquisition of Amcom Software, Inc. in 2011. Such intangibles are being amortized over a period of ten years.

The net consolidated balance of intangible assets consisted of the following at March 31, 2019:

		March 31, 2019		
(Dollars in thousands)	Useful Life (In Years)	Gross Carrying Amount	Accumulated Amortization	Net Balance
Customer relationships	10	$ 25,002	$ (20,210)	$ 4,792

Estimated amortization of intangible assets for future periods was as follows:

	(Dollars in thousands)
For the remaining nine months ending December 31, 2019	$ 1,875
For the year ending December 31:	
2020	2,500
2021	417
Total amortizable intangible assets	$ 4,792

NOTE 9 - ASSET RETIREMENT OBLIGATIONS

The components of the changes in the asset retirement obligation liabilities were:

(Dollars in thousands)	Short-Term Portion	Long-Term Portion	Total
Balance at January 1, 2019	$ 34	$ 6,513	$ 6,547
Accretion	10	128	138
Amounts paid	(29)	—	(29)
Increases	—	3	3
Reclassifications	29	(29)	—
Balance at March 31, 2019	$ 44	$ 6,615	$ 6,659

The balances above were included within other current liabilities and other non-current liabilities on the Condensed Consolidated Balance Sheet, respectively, at March 31, 2019.

Increases and reductions other than accretion, reclassification and amounts paid primarily relate to changes in estimate of the underlying liability, specifically as it relates to updates in estimated costs to remove a transmitter and the estimated timing of removal. The cost associated with the estimated removal costs and timing refinements due to ongoing network rationalization activities is expected to accrete to a total liability of $8.1 million. The total estimated liability is based on the transmitter locations remaining after we have consolidated the number of networks we operate and assume the underlying leases continue to be renewed to that future date.

Accretion expense was $0.1 million for the three months ended March 31, 2019 and 2018. Accretion expense related solely to asset retirement obligations and was recorded based on the interest method.

NOTE 10 - STOCKHOLDERS' EQUITY

General

Our authorized capital stock consists of 75 million shares of common stock, par value $0.0001 per share, and 25 million shares of preferred stock, par value $0.0001 per share.

At March 31, 2019 and December 31, 2018, we had no stock options outstanding.

At March 31, 2019 and December 31, 2018, there were 19,204,056 and 19,389,066 shares of common stock outstanding, respectively, and no shares of preferred stock outstanding.

Dividends

The following table details our cash dividends declared in 2019. Cash dividends paid as disclosed in the Condensed Consolidated Statement of Cash Flows for the three months ended March 31, 2019 and 2018 include previously declared cash dividends on shares of vested restricted common stock ("restricted stock") issued to our non-executive directors and dividends related to vested restricted stock units ("RSUs") issued to eligible employees. Cash dividends on RSUs and restricted stock have been accrued and are paid when the applicable vesting conditions are met. Accrued cash dividends on forfeited restricted stock and RSUs are also forfeited.

Declaration Date	Record Date	Payment Date	Per Share Amount	Total Declared[(1)]
				(Dollars in thousands)
February 27, 2019	March 15, 2019	March 29, 2019	$ 0.125	$ 2,479

(1) The total declared reflects the cash dividends declared in relation to common stock and unvested RSUs.

On April 24, 2019, our Board of Directors declared a regular quarterly cash dividend of $0.125 per share of common stock with a record date of May 24, 2019, and a payment date of June 24, 2019. This cash dividend of approximately $2.4 million will be paid from available cash on hand.

Common Stock Repurchase Program

In August 2018, the Company's Board of Directors authorized the repurchase of up to $10.0 million of the Company's common stock through December 31, 2018 on the open market or in privately negotiated transactions. In November 2018, the Company's Board of Directors extended the repurchase authority through December 31, 2019. The following table presents information with respect to purchases made by the Company during the three months ended March 31, 2019:

Period	Total Number of Shares Purchased	Average Price Paid Per Share[(1)]	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
				(Dollars in thousands)
Balance at January 1, 2019				$ 6,555
Three Months Ended March 31, 2019	131,012	$ 13.77	131,012	$ 4,749

(1) Average price paid per share excludes commissions of approximately $5,240.

The above table excludes shares repurchased to settle employee tax withholding related to the vesting of equity awards.

Net Income per Common Share

Basic net income per common share is computed on the basis of the weighted average common shares outstanding. Diluted net income per common share is computed on the basis of the weighted average common shares outstanding plus the effect of all potentially dilutive common shares including outstanding restricted stock and RSUs, which are treated as contingently issuable shares, using the "treasury stock" method.

The components of basic and diluted net income per common share were as follows for the periods stated:

	For the Three Months Ended March 31,	
(in thousands, except for share and per share amounts)	**2019**	**2018**
Numerator:		
Net income	$ 742	$ 345
Denominator:		
Basic weighted average outstanding shares of common stock	19,196,970	20,027,800
Diluted weighted average outstanding shares of common stock	19,356,712	20,153,291
Basic and diluted net income per common share	$ 0.04	$ 0.02

Share-Based Compensation Plans

On March 23, 2012, our Board of Directors adopted the Spok Holdings, Inc. 2012 Equity Incentive Award Plan (the "2012 Equity Plan") that was subsequently approved by our stockholders on May 16, 2012. A total of 2,194,986 shares of common stock have been reserved for issuance under this plan. Awards under the 2012 Equity Plan may be in the form of stock options, common stock, restricted stock, RSUs, performance awards, dividend equivalents, deferred stock, deferred stock units, or stock appreciation rights. Restricted stock awards generally vest one year from the date of grant. Related dividends accumulate during the vesting period and are paid at the time of vesting. Contingent RSUs generally vest over a three-year performance period upon successful completion of the performance objectives. Non-contingent RSUs generally vest in thirds, annually, over a three-year period. Dividend equivalents rights generally accompany each RSU award and those rights accumulate and vest along with the underlying RSU.

The following table summarizes the activities under the 2012 Equity Plan from January 1, 2019 through March 31, 2019:

	Activity
Total equity securities available at January 1, 2019	904,437
RSU and restricted stock awarded to eligible employees, net of forfeitures	(240,588)
Total equity securities available at March 31, 2019	663,849

The following table details activities with respect to outstanding RSUs and restricted stock for the three months ended March 31, 2019:

	Shares	Weighted-Average Grant Date Fair Value
Unvested at January 1, 2019	404,325	$ 17.27
Granted	333,655	13.26
Vested	(14,057)	15.65
Forfeited	(101,173)	15.68
Unvested at March 31, 2019	622,750	$ 15.42

Of the 622,750 unvested RSUs and restricted stock outstanding at March 31, 2019, 363,169 RSUs include contingent performance requirements for vesting purposes. At March 31, 2019, there was $5.9 million of unrecognized net compensation cost related to RSUs and restricted stock, which is expected to be recognized over a weighted average period of 2.0 years.

Employee Stock Purchase Plan. In 2016, our Board of Directors adopted the Spok Holdings, Inc. Employee Stock Purchase Plan ("ESPP") that was subsequently approved by our stockholders on July 25, 2016. A total of 250,000 shares of common stock have been reserved for issuance under this plan.

The Company's ESPP allows employees to purchase shares of common stock at a discounted rate, subject to plan limitations. Under the ESPP, eligible participants can voluntarily elect to have contributions withheld from their pay for the duration of an offering period, subject to the ESPP limits. At the end of an offering period, contributions will be used to purchase the Company's common stock at a discount to the market price based on the first or last day of the offering period, whichever is lower. Participants are required to hold common stock for a minimum period of two years from the grant date. Participants will begin earning dividends on shares after the purchase date. Each offering period will generally last for no longer than six months. Once an offering period begins, participants cannot adjust their withholding amount. If a participant chooses to withdraw, any previously withheld funds will be returned to the participant, with no stock purchased, and that participant will be eligible to participate in the ESPP at the next offering period. If the participant terminates employment with the Company during the offering period, all contributions will be returned to the employee and no stock will be purchased at a discounted rate.

The Company uses the Black-Scholes model to calculate the fair value of the common stock to be purchased each offering period on their offer date. The Black-Scholes model requires the use of estimates for the expected term, the expected volatility of the underlying common stock over the expected term, the risk-free interest rate and the expected dividend payment.

For the three months ended March 31, 2019 and 2018 no shares of the Company's common stock were purchased.

The following table summarizes the activities under the ESPP from January 1, 2019 through March 31, 2019:

	Activity
Total ESPP equity securities available at January 1, 2019	208,159
ESPP common stock purchased by eligible employees	—
Total ESPP securities available at March 31, 2019	208,159

Amounts withheld from participants will be classified an accrued compensation and benefit on the Condensed Consolidated Balance Sheets until funds are used to purchase shares. This liability amount is immaterial to the Condensed Consolidated Financial Statements.

Stock-Based Compensation Expense

We record all stock-based awards, which consist of RSUs, restricted stock and the option to purchase common stock under the ESPP, at fair value as of the grant date. Stock-based compensation expense is recognized based on a straight-line amortization basis over the respective service period. Forfeitures and withdrawals are accounted for as incurred.

The following table reflects the items for stock-based compensation expense on the Condensed Consolidated Statement of Operations for the periods stated:

	For the Three Months Ended March 31,	
(Dollars in thousands)	**2019**	**2018**
Performance-based RSUs	$ 107	$ 504
Time-based RSUs and restricted stock	404	713
ESPP	17	17
Total stock-based compensation	$ 528	$ 1,234

NOTE 11 - INCOME TAXES

Spok files a consolidated U.S. Federal income tax return and income tax returns in various state, local and foreign jurisdictions as required.

Our quarterly tax provision, and our quarterly estimate of our annual effective tax rate, is subject to significant variation due to several factors, including variability in accurately predicting our pre-tax and taxable income and loss and the mix of jurisdictions to which they relate, changes in how we do business, changes in our stock price, foreign currency gains (losses), tax law developments (including changes in statutes, regulations, case law, and administrative practices), and relative changes of expenses or losses for which tax benefits are not recognized. Additionally, our effective tax rate can be more or less volatile based on the amount of pre-tax income or loss. For example, the impact of discrete items and non-deductible expenses on our effective tax rate is greater when our pre-tax income is lower

For 2019, the anticipated effective income tax rate is expected to continue to differ from the Federal statutory rate of 21% primarily due to the effect of state income taxes, research and development credits, permanent differences between book and taxable income and certain discrete items.

At March 31, 2019, we had total deferred income tax assets ("DTAs") of $46.0 million and no valuation allowance. This reflects a decrease of $0.5 million from the December 31, 2018 of DTAs of $46.5 million and no valuation allowance.

We consider both positive and negative evidence when evaluating the recoverability of our DTAs. The assessment is required to determine whether based on all available evidence, it is more likely than not (i.e., greater than a 50% probability) that all or some portion of the DTAs will be realized in the future. During the fourth quarter of each year, we update our multi-year forecast of taxable income for our operations which assists in analyzing the recoverability of our DTAs.

NOTE 12 - COMMITMENTS AND CONTINGENCIES

There have been no material changes during the three months ended March 31, 2019 to the commitments and contingencies previously reported in the 2018 Annual Report.

NOTE 13 - RELATED PARTIES

A member of our Board of Directors also serves as a director for an entity that leases transmission tower sites to the Company. For the three months ended March 31, 2019 and 2018, we incurred site rent expenses of $0.9 million from the entity on which the individual serves as a director. Site rent expenses are included in Technology operations expenses on the Condensed Consolidated Statement of Operations.

ITEM 2. ***MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS***

Forward-Looking Statements

This Quarterly Report contains forward-looking statements and information relating to Spok Holdings, Inc. and its subsidiaries (collectively, “we,” “Spok,” "our" or the “Company”) that set forth anticipated results based on management’s current plans, known trends and assumptions. These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements that are predictive in nature, that depend upon or refer to future events or conditions, or that include words such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “will,” “target,” “forecast” and similar expressions, as they relate to Spok are forward-looking statements.

Although these statements are based upon current plans, known trends and assumptions that management considers reasonable, they are subject to certain risks, uncertainties and assumptions, including but not limited to those discussed below and under the captions “Business,” “Management’s Discussion and Analysis of Financial Condition and Statement of Operations (“MD&A”),” and “Risk Factors” in our 2018 Annual Report. Should known or unknown risks or uncertainties materialize, known trends change, or underlying assumptions prove inaccurate, actual results or outcomes may differ materially from past results and those described herein as anticipated, believed, estimated, expected, intended, targeted or forecasted. Investors are cautioned not to place undue reliance on these forward-looking statements.

The Company undertakes no obligation to update forward-looking statements. Investors are advised to consult all further disclosures the Company makes in its subsequent reports on Form 10-Q and Form 8-K that it will file with the SEC. Also note that, in the risk factors disclosed in the Company’s 2018 Annual Report, the Company provides a cautionary discussion of risks, uncertainties and possibly inaccurate assumptions relevant to its business. These are factors that, individually or in the aggregate, could cause the Company’s actual results to differ materially from past results as well as those results that may be anticipated, believed, estimated, expected, intended, targeted or forecasted. It is not possible to predict or identify all such risk factors. Consequently, investors should not consider the risk factor discussion to be a complete discussion of all of the potential risks or uncertainties that could affect Spok's business, statement of operations or financial condition, subsequent to the filing of this Quarterly Report.

Overview

The following MD&A is intended to help the reader understand the Statement of Operations and Financial Position of Spok. This MD&A is provided as a supplement to, and should be read in conjunction with, our 2018 Annual Report and our unaudited Condensed Consolidated Financial Statements and accompanying notes. A reference to a “Note” in this section refers to the accompanying Unaudited Notes to Condensed Consolidated Financial Statements.

Spok, acting through its indirect wholly-owned operating subsidiary, Spok, Inc., delivers smart, reliable solutions to help protect the health, well-being and safety of people primarily in the United States. Organizations rely on Spok for workflow improvement, secure texting, paging services, contact center optimization and public safety response.

Business

See Note 1 to our Unaudited Notes to Condensed Consolidated Financial Statements of Part I of this Quarterly Report on Form 10-Q ("Quarterly Report") and "Item 1. Business" of Part I of the 2018 Annual Report, which describes our business in further detail.

Revenue

We offer a suite of unified clinical communications and collaboration solutions that include call center operations, clinical alerting and notifications, one-way and advanced two-way wireless messaging services, mobile communications and public safety response.

We develop, sell and support enterprise-wide systems for healthcare, government, large enterprise and other organizations needing to automate, centralize and standardize their approach to clinical communications and collaboration. Our solutions can be found in prominent hospitals; large government agencies; leading public safety institutions, colleges and universities; large hotels, resorts and casinos; and well-known manufacturers. Our primary market has been the healthcare industry, particularly hospitals. We have identified hospitals with 200 or more beds as the primary targets for our software and wireless solutions.

Revenue generated by wireless messaging services (including voice mail, personalized greeting, message storage and retrieval) and equipment loss and/or maintenance protection for both one-way and two-way messaging subscribers is presented as wireless revenue in our Statement of Operations. Revenue generated by the sale of our software solutions, which includes software subscription, software license, professional services (installation, consulting and training), equipment (to be used in conjunction with the software) and post-contract support (on-going maintenance), is presented as software revenue in our Statement of Operations. Our software is licensed to end users under an industry standard software license agreement. For the three months ended March 31, 2019 wireless revenue represented approximately 54.1% and software revenue represented approximately 45.9% of our consolidated revenue.

Refer to Note 5, "Revenues, Deferred Revenue and Deferred Commissions" for additional information on our wireless and software revenue streams.

Operating Expenses

Our operating expenses are presented in functional categories. Certain of our functional categories are especially important to overall expense control and management. These operating expenses are categorized as follows:

- *Cost of revenue*. These are expenses primarily for hardware, third-party software, outside service expenses and payroll and related expenses for our professional services, logistics, customer support and maintenance staff.
- *Research and Development.* These expenses relate primarily to the development of new software products and the ongoing maintenance and enhancement of existing products. This classification consists primarily of employee payroll and related expenses, outside services related to the design, development, testing and enhancement of our solutions and to a lesser extent hardware equipment.
- *Technology operations*. These are expenses associated with the operation of our paging networks. Expenses consist largely of site rent expenses for transmitter locations, telecommunication expenses to deliver messages over our paging networks, and payroll and related expenses for our engineering and pager repair functions. We actively pursue opportunities to consolidate transmitters and other technology operations expenses in order to maintain an efficient network while simultaneously ensuring adequate service for our customers. We believe continued reductions in these expenses will occur as our networks continue to be consolidated for the foreseeable future.
- *Selling and marketing*. The sales and marketing staff are involved in selling our communication solutions primarily in the United States. These expenses support our efforts to maintain gross placements of units in service, which mitigated the impact of disconnects on our wireless revenue base, and to identify business opportunities for additional or future software sales. We have a centralized marketing function, which is focused on supporting our products and vertical sales efforts by strengthening our brand, generating sales leads and facilitating the sales process. These marketing functions are accomplished through targeted email campaigns, webinars, regional and national user conferences, monthly newsletters and participation at industry trade shows. Expenses consist largely of payroll and related expenses, commissions and other costs such as travel and advertising costs.
- *General and administrative*. These are expenses associated with information technology and administrative functions, which includes finance and accounting, human resources and executive management. This classification consists primarily of payroll and related expenses, outside service expenses, taxes, licenses and permit expenses, and facility rent expenses.

Results of Operations

The following table is a summary of our Consolidated Statement of Operations for the Three Months Ended March 31, 2019 and 2018

(Dollars in thousands)	For the Three Months Ended March 31, 2019	2018	Change Total	%
Revenue:				
Wireless	$ 22,610	$ 24,269	$ (1,659)	(6.8)%
Software	19,154	18,845	309	1.6 %
Total revenue	41,764	43,114	(1,350)	(3.1)%
Operating expenses:				
Cost of revenue	7,592	7,878	(286)	(3.6)%
Research and development	6,167	5,735	432	7.5 %
Technology operations	7,674	7,750	(76)	(1.0)%
Selling and marketing	6,110	6,490	(380)	(5.9)%
General and administrative	10,747	11,964	(1,217)	(10.2)%
Depreciation, amortization and accretion	2,359	2,713	(354)	(13.0)%
Total operating expenses	40,649	42,530	(1,881)	(4.4)%
Operating income	1,115	584	531	90.9 %
Interest income	449	283	166	58.7 %
Other (expense) income	(236)	(47)	(189)	402.1 %
Income before income taxes	1,328	820	508	62.0 %
Income tax expense	(586)	(475)	(111)	23.4 %
Net income	$ 742	$ 345	$ 397	115.1 %
Supplemental Information				
FTEs	591	599	(8)	(1.3)%
Active transmitters	3,909	3,996	(87)	(2.2)%

Revenue

The table below details total revenue for the periods stated:

(Dollars in thousands)	For the Three Months Ended March 31, 2019	2018	Change Total	%
Revenue - wireless:				
Paging revenue	$ 21,687	$ 23,308	$ (1,621)	(7.0)%
Product and other revenue	923	961	(38)	(4.0)%
Total wireless revenue	22,610	24,269	(1,659)	(6.8)%
Revenue - software:				
License	2,840	4,376	(1,536)	(35.1)%
Services	5,206	4,071	1,135	27.9 %
Equipment	963	1,024	(61)	(6.0)%
Operations revenue	9,009	9,471	(462)	(4.9)%
Maintenance revenue	10,145	9,374	771	8.2 %
Total software revenue	19,154	18,845	309	1.6 %
Total revenue	$ 41,764	$ 43,114	$ (1,350)	(3.1)%

The decrease in wireless revenue for the three months ended March 31, 2019 compared to the same period in 2018 reflects the decrease in demand for our wireless services. Wireless revenue is generally based upon the number of units in service and the monthly Average Revenue Per User ("ARPU"). On a consolidated basis ARPU is affected by several factors, including the mix of units in service and the pricing of the various components of our services. The number of units in service changes based on subscribers added, referred to as gross placements, less subscriber cancellations, or disconnects. ARPU for the three months ended March 31, 2019 and 2018 was $7.32 and $7.47, respectively, while total units in service were 1.0 million for both periods. While demand for wireless services continues to decline, it has done so at a slower rate than historically experienced. While we are encouraged that this trend will continue in future periods, we believe that demand will continue to decline for the foreseeable future in line with recent and historical trends. As our wireless products and services are replaced with other competing technologies, such as the shift from narrow band wireless service offerings to broad band technology services, our wireless revenue will continue to decrease.

The following reflects the impact of subscribers and ARPU on the change in wireless revenue:

(in thousands)	Units in Service as of March 31, 2019	2018	Change	Revenue for the Three Months Ended March 31, 2019	2018	Change	Change Due To: ARPU	Units
Total	982	1,030	(48)	$ 21,687	$ 23,308	$ (1,621)	$ (485)	$ (1,136)

As demand for one-way and two-way messaging has declined, we have developed or added service offerings such as encrypted paging and Spok Mobile with a pager number in order to increase our revenue potential and mitigate the decline in our wireless revenue. We will continue to explore ways to innovate and provide customers the highest value possible.

For the three months ended March 31, 2019 as compared to the same period in 2018, the decrease in operations revenue primarily resulted from the delivery of fewer software licenses partially offset by an increase in services revenue stemming from stronger utilization rates and more efficient projects. The increase in maintenance revenue is a result of the continued success of revenue renewal rates. The maintenance revenue renewal rates for the three months ended March 31, 2019 and 2018 were in excess of 99% and reflect our continuing success in renewals of our maintenance support for existing software solutions and in maintenance support for sales of new solutions.

Operating Expenses

The following is a review of our operating expense categories for the three months ended March 31, 2019 and 2018.

Cost of revenue. Cost of revenue consisted primarily of the following items:

	For the Three Months Ended March 31,		Change	
(Dollars in thousands)	**2019**	**2018**	**Total**	**%**
Payroll and related	$ 4,931	$ 4,874	$ 57	1.2 %
Cost of sales	2,080	2,475	(395)	(16.0)%
Stock-based compensation	107	55	52	94.5 %
Other	474	474	—	— %
Total cost of revenue	$ 7,592	$ 7,878	$ (286)	(3.6)%
FTEs	177	187	(10)	(5.3)%

Cost of revenue expense decreased for the three months ended March 31, 2019 compared to the same period in 2018 primarily due to a decrease in cost of sales. The decrease in cost of sales is primarily attributable to lower royalty costs for third party licenses and less use of third party resources for professional services.

Research and Development. Research and development expenses consisted of the following items:

	For the Three Months Ended March 31,		Change	
(Dollars in thousands)	**2019**	**2018**	**Total**	**%**
Payroll and related	$ 4,263	$ 4,002	$ 261	6.5 %
Outside services	1,745	1,513	232	15.3 %
Stock-based compensation	11	71	(60)	(84.5)%
Other	148	149	(1)	(0.7)%
Total research and development	$ 6,167	$ 5,735	$ 432	7.5 %
FTEs	121	110	11	10.0 %

Research and development expense increased for the three months ended March 31, 2019 compared to the same period in 2018 as a result of our anticipated increases in payroll and outside service related costs as we continue to focus on the development efforts of our software solutions. We intend to continue these efforts based on their importance to our continued success and do not anticipate a return to historically low costs. However, we believe increases in staffing and the use of outside services will begin to grow at a slower pace during 2019. These costs will continue to substantially impact margins and our cash flow from operations as the benefits from our development efforts will not immediately be realized for at least one to three years.

Technology Operations. Technology operations expenses consisted primarily of the following items:

	For the Three Months Ended March 31,		Change	
(Dollars in thousands)	**2019**	**2018**	**Total**	**%**
Payroll and related	$ 2,647	$ 2,693	$ (46)	(1.7)%
Site rent	3,296	3,496	(200)	(5.7)%
Telecommunications	996	898	98	10.9 %
Stock-based compensation	30	24	6	25.0 %
Other	705	639	66	10.3 %
Technology Operations	$ 7,674	$ 7,750	$ (76)	(1.0)%
FTEs	92	92	—	— %

Technology operations expense decreased for the three months ended March 31, 2019 compared to the same period in 2018 primarily due to the reduction in site rent partially offset by the increase in telecommunications and other minor expenses. The number of active transmitters declined 2.2% from March 31, 2019 compared to March 31, 2018. The number of active transmitters directly relates to the amount of site rent and telecommunications expenses we generally incur on a recurring basis. As we reach certain minimum frequency commitments, as outlined by the United States Federal Communications Commission, we may be unable to continue to our efforts to rationalize and consolidate our networks.

Selling and Marketing. Selling and marketing expenses consisted of the following items:

	For the Three Months Ended March 31,		Change	
(Dollars in thousands)	**2019**	**2018**	**Total**	**%**
Payroll and related	$ 3,273	$ 3,294	$ (21)	(0.6)%
Commissions	1,424	1,774	(350)	(19.7)%
Stock-based compensation	161	135	26	19.3 %
Advertising and events	933	1,158	(225)	(19.4)%
Other	319	129	190	147.3 %
Total selling and marketing	$ 6,110	$ 6,490	$ (380)	(5.9)%
FTEs	95	99	(4)	(4.0)%

Selling and marketing expenses decreased for the three months ended March 31, 2019 compared to the same period in 2018 primarily due to the decrease in commissions and advertising and events partially offset by other minor expenses. The decrease in advertising and events is largely due to a decrease in digital marketing and travel expenses. The decrease in commissions expenses primarily relates to the mix of revenue and the related commissions associated with those revenues. Commissions were paid at a higher rate on revenues that were recognized during the three months ended March 31, 2018 as compared to the three months ended March 31, 2019.

General and Administrative. General and administrative expenses consisted of the following items:

(Dollars in thousands)	For the Three Months Ended March 31, 2019	2018	Change Total	%
Payroll and related	$ 4,041	$ 4,416	$ (375)	(8.5)%
Stock based compensation	219	949	(730)	(76.9)%
Bad debt	308	528	(220)	(41.7)%
Facility rent and office costs	2,294	2,144	150	7.0 %
Outside services	1,776	1,919	(143)	(7.5)%
Taxes, licenses and permits	921	1,080	(159)	(14.7)%
Other	1,188	928	260	28.0 %
Total general and administrative	$ 10,747	$ 11,964	$ (1,217)	(10.2)%
FTEs	106	111	(5)	(4.5)%

General and administrative expense decreased for the three months ended March 31, 2019 compared to the same period in 2018 primarily due to the decrease in payroll and related, stock based compensation, and bad debt expense. The decrease in payroll and related is primarily due to a decrease in headcount as well as short-term bonus forfeitures related to the resignation of a named executive officer ("NEO"). The decrease in stock-based compensation is largely due to forfeitures related to the previously mentioned resignation of the NEO during three months ended March 31, 2019. The decrease in bad debt is related to a change in methodology meant to provide additional coverage for our exposure to potentially uncollectible accounts receivable during three months ended March 31, 2018 that did not occur for the three months ended March 31, 2019.

Depreciation, Amortization and Accretion. Depreciation, amortization and accretion expenses were $2.4 million for the three months ended March 31, 2019 compared to $2.7 million for the same period in 2018. The decrease of $0.3 million in depreciation, amortization and accretion expenses for the three months ended March 31, 2019 compared to the same period in 2018 is primarily due to certain paging assets becoming fully depreciated in 2018. (For additional details regarding depreciation, amortization and accretion expenses refer to Note 7, "Consolidated Financial Statement Components.")

Income tax expense. Income tax expense increased $0.1 million for the three months ended March 31, 2019 compared to the same period in 2018. The change in the provision for income taxes primarily relates to an increase in pre-tax book income for the three months ended March 31, 2019 as compared to the same period in 2018, partially offset by the change in the projected annual effective tax rate as a result of certain permanent tax differences, estimated research and development tax credits and certain discrete items. Further details can be found in Note 11, "Income Taxes."

Liquidity and Capital Resources

At March 31, 2019, we had cash and cash equivalents and short-term investments of $81.8 million.

The available cash and cash equivalents are held in accounts managed by third-party financial institutions and consist of invested cash and cash in our operating accounts. The invested cash is invested in interest bearing funds managed by third-party financial institutions. These funds invest in direct obligations of the government of the United States. To date, we have experienced no loss or lack of access to our invested cash or cash equivalents; however, we can provide no assurance that access to our invested cash and cash equivalents will not be impacted by adverse market conditions. Our short-term investments consist entirely of U.S. Treasury securities which are classified as held-to-maturity and are measured at amortized cost on our Condensed Consolidated Balance Sheet.

At any point in time, we have approximately $7.0 to $12.0 million in our operating accounts that are with third-party financial institutions. While we monitor daily the cash balances in our operating accounts and adjust the cash balances as appropriate, these cash balances could be impacted if the underlying financial institutions fail or are subject to other adverse conditions in the financial markets. To date, we have experienced no loss or lack of access to cash in our operating accounts.

We intend to use our cash on hand to provide working capital, to support operations, to invest in our business, and to return value to stockholders through cash dividends and possible repurchases of our common stock. We may also consider using cash to fund or complete opportunistic investments and acquisitions that we believe will provide a measure of growth or revenue stability while supporting our existing operations. Because we intend to continue to substantially invest in the development of our integrated communications platform over the next several years, commensurate with declining revenues from our wireless business, we anticipate that our cash on hand will decrease significantly during that period and possibly longer until revenues from our Spok Care Connect platform begin to be realized.

Overview

In the event that net cash provided by operating activities and cash on hand are not sufficient to meet future cash requirements, we may be required to reduce planned capital expenses, reduce or eliminate our cash dividends to stockholders, not resume our common stock repurchase program, sell assets and/or seek outside financing. We can provide no assurance that reductions in planned capital expenses or proceeds from asset sales would be sufficient to cover shortfalls in available cash or that outside financing would be available on acceptable terms.

Based on current and anticipated levels of operations, we anticipate net cash provided by operating activities, together with the available cash on hand at March 31, 2019, should be adequate to meet our anticipated cash requirements for the foreseeable future.

The following table sets forth information on our net cash flows from operating, investing, and financing activities for the periods stated:

	Three Months Ended March 31,		
(Dollars in thousands)	**2019**	**2018**	**Change**
Net cash provided by operating activities	$ 1,223	$ 945	$ 278
Net cash used in investing activities	(16,111)	(1,164)	(14,947)
Net cash used in financing activities	(5,468)	(5,559)	91

Net Cash Provided by Operating Activities. As discussed above, we are dependent on cash flows provided by operating activities to meet our cash requirements. Cash provided by operating activities varies depending on changes in various working capital items including deferred revenue, accounts payable, accounts receivable, prepaid expenses and various accrued expenses. Net cash provided by operating activities increased by $0.3 million for the three months ended March 31, 2019 compared to the same period in 2018. The increase of $0.3 million is related to an increase in net income of $0.4 million (increase in cash flow), a decrease of $0.4 million in depreciation, amortization and accretion expenses (decrease in cash flow), a decrease in non-cash items of $0.2 million (decrease in cash flow), and a decrease in stock-based compensation of $0.7 million (decrease in cash flow). With respect to changes in assets and liabilities the net cash provided by operating activities reflects a net $14.9 million greater decrease to assets (decrease in cash flow), a $1.3 million greater decrease in deferred revenue (decrease in cash flow) partially offset by a $17.4 million greater increase in accounts payable, accrued liabilities and other (increase in cash flow). The decrease in assets and increase in accounts, payable, accrued liabilities and other is primarily related to the adoption of ASC 842, resulting in an increase to assets and liabilities of approximately $17.4 million. For additional details refer to Note 4, "Significant Accounting Policies Update" and Note 6, "Leases".

Net Cash Used in Investing Activities. Net cash used in investing activities increased by $14.9 million for the three months ended March 31, 2019 compared to the same period in 2018 primarily due to the purchase of additional U.S. treasury securities.

Net Cash Used in Financing Activities. Net cash used in financing activities decreased by $0.1 million for the three months ended March 31, 2019 compared to the same period in 2018. Financing activities were largely comprised of similar activity for both periods.

Future Cash Dividends to Stockholders. On April 24, 2019, our Board of Directors declared a regular quarterly cash dividend of $0.125 per share of common stock with a record date of May 24, 2019, and a payment date of June 24, 2019. This cash dividend of approximately $2.4 million will be paid from available cash on hand.

Common Stock Repurchase Program. In August 2018, the Company's Board of Directors authorized the repurchase of up to $10.0 million of the Company's common stock through December 31, 2018 on the open market or in privately negotiated transactions. In November 2018, the Company's Board of Directors extended the repurchase authority through December 31, 2019. For additional details regarding the common stock repurchase program refer to Note 10, "Stockholders' Equity."

Other. For 2019, the Board of Directors currently expects to pay dividends of $0.125 per common share each quarter, subject to declaration by the Board of Directors.

Commitments and Contingencies

Operating Leases. We have operating leases for office and transmitter locations. Substantially all of these leases have lease terms ranging from one month to five years. We continue to review our office and transmitter locations, and intend to replace, reduce or consolidate leases, where possible. As we reach certain minimum frequency commitments, as outlined by the United States Federal Communications Commission, we may be unable to continue to our efforts to rationalize and consolidate our networks. Total rent expense under operating leases was $4.2 million for the three months ended March 31, 2019 and 2018, respectively.

Off-Balance Sheet Arrangements. We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in such relationships.

Commitments and Contingencies. See Note 12 to our Unaudited Notes to Condensed Consolidated Financial Statements in Part I of this Quarterly Report for further discussion on our commitments and contingencies.

Related Party Transactions

See Note 13 to our Unaudited Notes to Condensed Consolidated Financial Statement in Part I of this Quarterly Report for a discussion regarding our related party transactions.

Critical Accounting Policies and Estimates

The preceding discussion and analysis of financial condition and operations is based on our Condensed Consolidated Financial Statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). The preparation of our Condensed Consolidated Financial Statements requires management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. On an on-going basis, we evaluate estimates and assumptions, including but not limited to those related to the impairment of long-lived assets and intangible assets subject to amortization and goodwill, accounts receivable, revenue recognition, asset retirement obligations, and income taxes. We base our estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

There have been no changes to the critical accounting policies reported in the 2018 Annual Report that affect our significant judgments and estimates used in the preparation of our Condensed Consolidated Financial Statements other than those outlined in Note 4 "Significant Accounting Policies Update."

ITEM 3. *QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK*

Interest Rate Risk

As of March 31, 2019, we had no outstanding debt and no revolving credit facility.

Foreign Currency Exchange Rate Risk

We conduct a limited amount of business outside the United States. The financial impact of transactions billed in foreign currencies is immaterial to our financial results and, consequently, we do not have any material exposure to the risk of foreign currency exchange rate fluctuations.

ITEM 4. *CONTROLS AND PROCEDURES*

Evaluation of Disclosure Controls and Procedures

Our management carried out an evaluation, as required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), with the participation of our principal executive officer and our principal financial officer, of the effectiveness of our disclosure controls and procedures, as of the end of our last fiscal quarter. Disclosure controls and procedures are defined under Rule 13a-15(e) under the Exchange Act as controls and other procedures of an issuer that are designed to ensure that the information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to the issuer's management, including its principal executive officer and principal financial officer, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Based upon this evaluation, our principal executive officer and our principal financial officer have concluded that our disclosure controls and procedures were effective as of March 31, 2019.

Changes in Internal Control Over Financial Reporting

There were no changes made to the Company's internal control over financial reporting during the three months ended March 31, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. *LEGAL PROCEEDINGS*

Refer to Note 12, "Commitments and Contingencies" in the Notes to Financial Statements for information regarding legal proceedings in which we are involved.

ITEM 1A. *RISK FACTORS*

The risk factors included in "Part I – Item 1A – Risk Factors" of the 2018 Annual Report have not materially changed during the quarter ended March 31, 2019.

ITEM 2. ***UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS***

The following table presents information with respect to purchases made by the Company of the Company's common stock during the three months ended March 31, 2019:

Period	Total Number of Shares Purchased		Average Price Paid Per Share[1]	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
					(Dollars in thousands)
Balance at January 1, 2019					6,555
January 1 to 31, 2019	101,717	$	13.78	101,717	5,152
February 1 to 28, 2019	29,295	$	13.76	29,295	4,749
March 1 to 31, 2019	—	$	—	—	4,749
For the three months ended March 31, 2019	131,012	$	13.77	131,012	

[1] Average price paid per share excludes commissions of approximately $5,240

For additional details regarding purchases made by the Company of the Company's common stock refer to Note 10, "Stockholders' Equity." The above table excludes shares repurchased to settle employee tax withholding related to the vesting of equity awards.

ITEM 6. ***EXHIBITS***

The exhibits listed in the accompanying Exhibit Index below are filed or incorporated by reference as part of this report.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed/Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
10.1†	Executive Employment Agreement, between Spok Holdings, Inc. and Vincent D. Kelly, dated as of January 3, 2019	8-K	001-32358	10.1	1/4/2019	
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended, dated April 25, 2019					Filed
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended, dated April 25, 2019					Filed
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350 dated April 25, 2019					Furnished
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350 dated April 25, 2019					Furnished
101.INS	XBRL Instance Document*					Furnished
101.SCH	XBRL Taxonomy Extension Schema*					Furnished
101.CAL	XBRL Taxonomy Extension Calculation*					Furnished
101.DEF	XBRL Taxonomy Extension Definition*					Furnished
101.LAB	XBRL Taxonomy Extension Labels*					Furnished
101.PRE	XBRL Taxonomy Extension Presentation*					Furnished

* The financial information contained in these XBRL documents is unaudited.

† Denotes a management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

SPOK HOLDINGS, INC.

Dated: April 25, 2019

/s/ Michael W. Wallace

Name: Michael W. Wallace

Title: Chief Financial Officer

(Principal Financial Officer and duly authorized officer)

Exhibit 31.1

CERTIFICATIONS

I, Vincent D. Kelly, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Spok Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: April 25, 2019

/s/ Vincent D. Kelly

Vincent D. Kelly

President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Michael W. Wallace, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Spok Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: April 25, 2019

/s/ Michael W. Wallace

Michael W. Wallace
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Spok Holdings, Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended March 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: April 25, 2019

/s/ Vincent D. Kelly

Vincent D. Kelly

President and Chief Executive Officer

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Spok Holdings, Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended March 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: April 25, 2019

/s/ Michael W. Wallace

Michael W. Wallace
Chief Financial Officer