BEFORE THE
UTAH PUBLIC SERVICE COMMISSION

Application of	)	
	)	
Commnet Rural America, LLC	)	
	)	Docket No. ________________
For a Certificate of Public Convenience and	)	
Necessity to Provide Resold and	)	
Facilities-Based Telecommunications Services	)	
within the State of Utah	)	

APPLICATION

Commnet Rural America, LLC ("Applicant"), by its undersigned representative and pursuant to Chapter 8(b) of Title 54 of the Utah Code; the Commission's Rules of Practice and Procedure, Utah Admin. Code §§ 746-100 *et seq*; and the federal Telecommunications Act of 1996 ("Telecom Act"), 47 U.S.C. §§ 151 *et seq*, hereby applies to the Utah Public Service Commission for a certificate of public convenience and necessity authorizing Applicant to operate as a provider of resold and facilities-based local exchange and interexchange telecommunications services in the State of Utah. In support of its application, Applicant provides the following information pursuant to Utah Admin. Code R746-349:

1. General Information

a. Corporate Information

Applicant's legal name is Commnet Rural America, LLC. Applicant may be reached at its principal place of business:

Commnet Rural America, LLC
400 Northridge Rd., Suite 1100
Atlanta, GA 30350
Telephone: (678) 338-596

Applicant is a limited liability company organized under the laws of the State of Delaware on October 3, 2018. A copy of Applicant's Operating Agreement and its authority to operate in Utah are attached hereto as **Exhibit A**.

b. Contact Information

Correspondence or communications pertaining to this Application should be directed to:

Rohan Ranaraja
Exec. Director Government and Regulatory Affairs
1001 Technology Dr., Suite 202
Little Rock, AR 72223
Email: Rranaraja@atni.com
Telephone: (501) 448-1249

Questions concerning the ongoing operations of Applicant following certification should be directed to:

Rohan Ranaraja
Exec. Director Government and Regulatory Affairs
1001 Technology Dr., Suite 202
Little Rock, AR 72223
Email: Rranaraja@atni.com
Telephone: (501) 448-1249

Applicant's registered agent in the State of Utah is:

Cogency Global Inc.
2005 East 2700 South, Suite 200
Salt Lake City, UT 84109

c. Customer Service Information

Applicant's toll-free number for customer inquiries is (888) 227-3236.

2. R746-349-3(A)(2). Proof of bond – waiver request.

This bond is intended to provide security for customer deposits or other liabilities to the Applicant's customers. Because Applicant does not intend to collect customer deposits for telecommunications services, offer any pre-paid services and will not offer end use services, it respectfully requests that the Commission grant a waiver for the requirement to show proof of a bond.

3. R746-349-3(A)(3). Facilities to be used.

Applicant plans to provide non-switched dedicated point-to-point private transport services to other telecommunications carriers and business customers. Applicant will provide its point-to-point transport services through a combination of deploying its own network and facilities, and using services leased from a variety of existing carriers and other suppliers. Applicant does not plan to provide switched voice services or dial-tone and will not provide such services to residential customers. Instead, it will primarily provide services to other carriers on a wholesale basis and possibly to other business customers if there is demand. Applicant's services will be subject to availability of equipment and technical/economic feasibility of constructing or leasing necessary facilities.

4. R746-349-3(A)(4). Services to be offered.

a. R746-349-3(A)(4)(a). Classes of customers.

Applicant proposes to offer its non-switched dedicated point-to-point private transport services to business customers and other telecommunications carriers.

b. R746-349-3(A)(4)(b). Location of service.

Applicant seeks authority for its services from all points in Utah where demand

for its services arises.

c. R746-349-3(A)(4)(b). Types of Services to be offered.

Applicant proposes to operate in Utah as a provider of non-switched dedicated point-to-point private transport services to other carriers and business customers.

5. 746-349-3(A)(5). Access to standard services.

Due to the type of service Applicant plans to provide, it will not provide access to standard intraLATA and interLATA message toll calling, operator services, directory assistance, directory listings, or emergency services such as 911 and E911 through its own operations.

6. R746-349-3(a)(6) Implementation Schedule.

Applicant anticipates offering its services after the approval of its Application for a CPCN and prior to end of year 2019.

7. R746-349-3(A)(7). Professional experience and education of managerial personnel.

Applicant does not plan to operate an office in Utah and instead will manage its Utah operations from its existing offices in Arkansas, Colorado, Georgia and Massachusetts. Commnet has the managerial and technical qualifications necessary to provide the proposed services in Utah. Attached hereto as **Exhibit B** are biographies of Applicant's officers and management personnel.

8. R746-349-3(A)(8). Organization Chart.

In lieu of an organization chart, Applicant offers the biographies of its officers and key management personnel set forth in **Exhibit B** to satisfy R746-349-3(A)(8).

9. R746-349-3(A)(9). Chart of Accounts.

Request for a chart of accounts is typically necessary with an entity using regulated rate

base or rate of return methodology so that authorities can be confident of the proper classification of revenue and expenses for end user pricing calculations. As Applicant's customers will not be end users, Applicant requests a waiver from providing a chart of accounts.

10. **R746-349-3(A)(10). Financial abilities.**

Applicant is financially qualified to offer the telecommunications services for which authority is sought. In particular, Applicant has access to the financing and capital necessary to conduct its telecommunications operation as specified in this application. Applicant's financials are reported on a consolidated basis with is parent company, ATN International, Inc. ("ATN"). Attached as **Exhibit C** are ATN financial statements as reported in its 2018 Form 10-K, including balance sheet, income statement and cash flow. ATN stands ready to provide any required financial backing for Applicant and as ATN's financial demonstrate, it is well qualified to support Applicant's operations if needed.

a. **R746-349-3(A)(10)(a)–(b). Balance sheet.** Please see **Exhibit C** for ATN's Balance Sheet and Income Statement as of December 31, 2018. Included in Exhibit C are the notes from the independent auditing firm attesting to the accuracy, of the financials and confirming that the financials were prepared in accordance with Generally Accepted Accounting Principles. In accordance with R746-349-3(A)(10), these financials show that Applicant, through its parent ATN, has a positive net worth and has access to sufficient cash flow to provide its proposed services.

11. **R746-349-3(A)(11). Financial Statements to demonstrate sufficient financial ability.**

a. **R746-349-3(A)(11)(a)-(b)**

See **Exhibit C** for evidence of positive net worth and cash flow. As evidenced

by its 2017 and 2018 financial statements, Applicant's parent, ATN has sufficient cash flow to support the provisioning of Applicant's proposed services.

b. **R746-349-3(A)(11)(c). Bond requirement.**

Applicant requests a waiver of this requirement as the company does not plan to solicit customer deposits or offer prepaid telecommunications services.

12. **R746-349(A)(12).**

a. **R746-349(A)(12)(a). Pro-forma income and cash flow statements.**

Please see **Exhibit C** for financial information.

b. **R746-349(A)(12)(b). Technical description of types of technology.**

Applicant will deploy the types of technology specified above in Section 3.

c. **R746-349(A)(12)(c). Maps of Facilities.**

The location of future facilities and descriptions of the specific facilities to be deployed will be determined based on demand and access to facilities.

13. **R746-349-3(A)(13). Implementation schedule.**

Applicant has not yet determined a schedule for deployment of facilities in Utah, but it intends to begin operations by end of year 2019.

14. **R746-349-3(A)(14). Technical and managerial abilities.**

Applicant has the managerial expertise necessary to provide facilities based and resold public telecommunications services within the State of Utah as demonstrated by the information contained in **Exhibit B**. Applicant is currently authorized to provide similar services in California, Georgia and Kansas and applicant has affiliates authorized to provide

similar services in Arizona, New Mexico and Nevada.

15. <u>R746-349-3(A)(15). Public Interest.</u>

Approval of Applicant's application will serve the public interest by creating greater competition in the local exchange marketplace. Applicant's presence in Utah will increase the incentives for other telecommunications providers to operate more efficiently, offer more innovative services, reduce prices and improve their quality of service. The public convenience and necessity, therefore, will be served by the issuance of a Certificate of Public Convenience and Necessity to Applicant authorizing it to provide the services described in this application.

16. <u>R746-349-3(A)(15). Proof of Authority to Conduct Business in Utah.</u>

Please see **Exhibit A**.

17. <u>R746-349-3(A)(17)–(18).Unauthorized switching, solicitation of new customers, and prevention of unauthorized switching.</u>

No complaints have been made nor has any investigation been undertaken against Applicant or any of its affiliates for unauthorized switching ("slamming") or any other illegal activities. In the future, if Applicant offers voice services, it will comply with Utah law and the Federal Communications Commission's ("FCC's") regulations regarding how interexchange carriers may change a consumer's Primary Interchange Carrier. Applicant will also comply with the FCC's regulations regarding how carriers may change a consumer's primary local exchange provider.

18. <u>R746-349-3(A)(18). Applicant's solicitation policies.</u>

Applicant's marketing will be limited in nature and will primarily focus on the provision of services to other providers and business customers. Therefore, the public's exposure to unauthorized switching of customers related to Applicant's marketing practices will be non-

existent. Nevertheless, as stated above, should Applicant offer voice services in the future it will comply with Utah law and FCC regulations regarding switching and solicitation of customers.

WHEREFORE, Commnet Rural America, LLC, respectfully requests that the Utah Public Service Commission issue a Certificate of Public Convenience and Necessity authorizing Commnet Rural America, LLC to provide facilities-based and resold local exchange and interexchange telecommunications services in the State of Utah.

Respectfully submitted,

Dated: June 17, 2019

/s/ Rohan Ranaraja___________
Rohan Ranaraja
Exe. Director-Government and Regulatory Affairs
1001 Technology Dr., Suite 202
Little Rock, AR 72223
Email: Rranaraja@atni.com
Telephone: (501) 448-1249

CERTIFICATE OF SERVICE

I certify that on the 17 day of June 2019, a true and correct copy of the foregoing was served upon the following as indicated below:

By Electronic Mail:

Rohan Ranaraja (Rranaraja@atni.com)
Public Service Commission of Utah (psc@utah.gov)

/s/ Britney Lloyd

LIST OF EXHIBITS

EXHIBIT A	Operating Agreement
EXHIBIT B	Managerial and Technical Qualifications
EXHIBIT C	Financial Statements
VERIFICATION	

<u>EXHIBIT A</u>

Operating Agreement

LIMITED LIABILITY COMPANY AGREEMENT

OF

COMMNET RURAL AMERICA, LLC

October 3, 2018

This Limited Liability Company Agreement (this "Agreement") of Commnet Rural America, LLC (the "Company") is made and entered into as of the date first written above by Commnet Wireless, LLC, a Delaware limited liability company, as the sole member (the "Member").

1. Name. The name of the limited liability company is: Commnet Rural America, LLC.

2. Purpose. The Company has been organized as a limited liability company pursuant to the Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.) (the "Act"). The Company may engage in any and all lawful acts or activities permitted under the Act.

3. Principal Place of Business. The principal office of the Company is c/o Commnet Wireless, LLC, 400 Northridge Road, Suite 325, Atlanta, GA 30350, and may be changed to such other place as may be determined from time to time by the Member.

4. Registered Office. The registered office of the Company in the State of Delaware is Cogency Global Inc., 850 New Burton Road, Suite 201, Dover, Delaware 19904.

5. Registered Agent. The name and address of the registered agent of the Company for service of process on the Company in the State of Delaware is Cogency Global Inc., 850 New Burton Road, Suite 201, Dover, Delaware 19904.

6. Member. The address of the Member is c/o Commnet Wireless, LLC, 400 Northridge Road, Suite 325, Atlanta, GA 30350, Attn: Mark Hlavek, Chief Financial Officer.

7. Powers. The powers of the Member include all powers, statutory and otherwise, possessed by members under the Act. The powers of the Company shall be exercised by or under the authority of, and the business and affairs of the Company shall be managed under the direction of, the Member, and the Member may make all decisions and take all actions for the Company not otherwise provided in this Agreement.

8. Term. The term of the Company commenced on the date its Certificate of Formation was filed with the Secretary of State for the State of Delaware, October 3, 2018, and shall continue until terminated as hereinafter provided.

9. Officers. The Member may, from time to time, delegate one or more persons such authority and duties as the Member deems advisable (collectively the "Officers"). In addition, the Member may assign titles (including, without limitation, chairman, managing director, chief executive officer, president, chief operating officer, chief financial officer, vice president, controller, secretary, assistant secretary, treasurer or assistant treasurer) to any persons and delegate to such persons certain authority and duties. Any number of titles may be held by the same person. Any delegation pursuant to this Section 9 may be revoked at any time by the Member in its sole and absolute discretion. Initially, the following individuals hold the following positions until their resignation or removal by the Member:

Name	Title
Joseph P. Moravec	President
Mark Hlavek	Chief Financial Officer
Ken Borner	Vice President – Engineering and Operations
Mark Hansen	Vice President – Network Engineering
Jeffrey Humiston	Secretary
Justin Benincasa	Treasurer
Clay McInnish	Assistant Treasurer
Andrew S. Fienberg	Assistant Treasurer
Michele A. Satrowsky	Assistant Treasurer

10. Capital Contributions. The Member will contribute amounts in cash to the capital of the Company as determined by the Member from time-to-time. All such capital contributions and the date thereof will be recorded on Exhibit A hereto.

11. Membership Interests; Units. The Member is the sole member of the Company and has all rights thereto, including without limitation, the right to receive all distributions, allocations of profit, loss, gains, deductions and other economic interests. The Member's interest in the Company shall be represented initially by 100 "Units" as reflected on Exhibit A hereto, which shall be amended as necessary to reflect new Members.

12. Additional Contributions. The Member may, but is not required to, make any additional capital contributions to the Company.

13. Additional Members. The Member may admit additional members. The Company shall continue as a limited liability company under the Act after the admission of any additional members pursuant to this Section 13. The admission of additional members pursuant to this Section 13 shall be accomplished by the amendment of this Agreement and, if required by

the Act, the filing of a certificate of amendment to the Certificate of Formation of the Company in the Office of the Secretary of State of the State of Delaware.

14. Liability, Exculpation; Indemnification; Expenses; D&O Insurance.

(a) Liability. Except as otherwise provided by the Act, the debts, obligations and liabilities of the Company, whether arising in contract, tort or otherwise, shall be solely the debts, obligations and liabilities of the Company, and neither the Member nor any officer, director, stockholder, member, partner, representative, agent or employee of the Member and no officer, employee, representative, agent or liquidator of the Company (each, a "Covered Person") shall be obligated personally for any such debt, obligation or liability of the Company solely by reason of being a Covered Person. The Member shall have no duty to the Company except as expressly set forth herein.

(b) Exculpation.

(i) No Covered Person shall be liable to the Company or any other Covered Person for any loss, damage or claim incurred by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement, except that a Covered Person shall be liable for any such loss, damage or claim incurred by reason of such Covered Person's gross negligence, fraud, willful misconduct or material breach of this Agreement or other agreement with the Company.

(ii) A Covered Person shall be fully protected in relying in good faith upon the records of the Company and upon such information, opinions, reports or statements presented to the Company by any Person as to matters the Covered Person reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Company, including information, opinions, reports or statements as to the value and amount of the assets, liabilities, profits, losses or income or any other facts pertinent to the existence and amount of assets from which distributions to the Member might properly be paid.

(c) Indemnification. To the fullest extent permitted by applicable law, a Covered Person shall be entitled to indemnification from the Company for any loss, damage or claim incurred by such Covered Person by reason of any act or omission performed or omitted by such Covered Person in good faith on behalf of the Company and in a manner reasonably believed to be within the scope of authority conferred on such Covered Person by this Agreement, except that no Covered Person shall be entitled to be indemnified in respect of any loss, damage or claim incurred by such Covered Person by reason of gross negligence, fraud, willful misconduct with respect to such acts or omissions or by reason of any material breach of such Covered Person's obligations under this Agreement or other agreement with the Company; provided, however, that any indemnity under this Section 14(c) shall be provided out of and to the extent of Company assets only, and no Covered Person shall have any personal liability on account thereof.

(d) Expenses. To the fullest extent permitted by applicable law, the Company shall assume the defense of the Covered Person, and expenses (including reasonable legal fees) incurred by a Covered Person in defending any claim, demand, action, suit or proceeding not assumed by the Company shall, from time to time, be paid or advanced by the Company prior to the final disposition of such claim, demand, action, suit or proceeding upon receipt by the Company of an undertaking by or on behalf of the Covered Person to repay such amount if it shall be determined that the Covered Person is not entitled to be indemnified as authorized in Section 14(c) hereof.

(e) Directors and Officers Insurance. The Company may maintain Directors and Officers insurance in form, scope and substance satisfactory to the Member.

15. Dissolution. The Company shall be dissolved and its affairs shall be wound up only upon the earlier of (a) the election to dissolve the Company by the Member or (b) the entry of a decree of judicial dissolution of the Company under the Act. Dissolution of the Company shall be effective as of the day on which the event occurs giving rise to the dissolution, but the Company shall not terminate until there has been a winding up of the Company's business and affairs in accordance with the Act.

16. Liquidation and Termination. Upon dissolution of the Company, the Member shall act as liquidator or may appoint (with their consent) one or more individual, corporation, partnership, joint venture, trust, estate, limited liability company, or other legal entity or organization or any government, governmental department or agency or political subdivision thereof (each a "Person") as liquidator. The liquidator shall proceed diligently to wind up the affairs of the Company and make final distributions as provided in the Act. The costs and expenses of liquidation shall be borne as a Company expense. Until final distribution, the liquidator shall continue to manage the Company's affairs with all the power and authority of the Member. After payment, satisfaction or discharge of the Company's debts, liabilities and obligations (or adequate provision therefor) has been made, all remaining assets of the Company shall be distributed to the Member.

17. Notices. Except as expressly set forth to the contrary in this Agreement, all notices, requests, or consents provided for or permitted to be given under this Agreement shall be in writing and shall be given either by depositing such writing in the United States mail, addressed to the recipient, postage paid, and registered or certified with return receipt requested or by delivering such writing to the recipient in person, by courier, or by facsimile transmission; and a notice, request, or consent given under this Agreement shall be effective on receipt by the Person to whom sent. Any notice, request, or consent to the Company must be sent to the address provided in Section 3 of this Agreement. All notices, requests, and consents to be sent to the Member shall be sent to it at the address set forth in Section 6 of this Agreement, with a copy to:

c/o ATN International, Inc.
500 Cummings Center, Suite 2450
Beverly, Massachusetts 01915
Attention: General Counsel
Facsimile: (978) 922-0079

Whenever any notice is required to be given by law, the Certificate of Formation or this Agreement, a written waiver thereof, signed by the Person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

18. Governing Law; Severability. This Agreement shall be governed by and shall be construed in accordance with the laws of the State of Delaware without giving effect to the application of any conflict or choice of law provisions thereof that would give rise to the application of the domestic substantive law of any other jurisdiction. If any provision of this Agreement or the application thereof to any Person or circumstance is held invalid or unenforceable to any extent, the remainder of this Agreement and the application of that provision to other Persons or circumstances shall not be affected thereby and such provision shall be enforced to the fullest extent permitted by law.

19. Further Assurances. In connection with this Agreement and the transactions contemplated hereby, the Member shall execute and deliver any additional documents and instruments and perform any additional acts that may be necessary or appropriate to effectuate and perform the provisions of this Agreement and those transactions.

20. Headings and Sections. The headings in this Agreement are inserted for convenience only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this Agreement or any provision hereof. Unless the context requires otherwise, all references in this Agreement to Sections shall be deemed to mean and refer to Sections of this Agreement.

21. Numbers and Gender. Where the context so indicates, the masculine shall include feminine and neuter, and the neuter shall include the masculine and feminine, and the singular shall include the plural.

22. Binding Effect. Except as otherwise provided in this Agreement to the contrary, this Agreement shall be binding upon and inure to the benefit of the Member, its distributees, heirs, legal representatives, executors, administrators, successors and assigns.

23. Amendment or Modification of Agreement. This Agreement may be amended or modified only by a written instrument executed by the Member.

24. Unit Certificates.

(a) The Company may issue certificates to represent the Units. The name of each member, together with the number of Units held by such member, shall be entered on the books of the Company and on Exhibit A hereto.

(b) Units of the Company shall only be transferred on the books of the Company by the holder of record thereof or by such holder's attorney duly authorized in writing, pursuant to the terms of this Agreement, with such evidence of the authenticity of such transfer and other matters as the Company may reasonably require. It shall be the duty of the Company to record any such transfers on its books.

(c) Restricted Securities. Any certificates issued to represent the Units shall bear the following legend: "THE UNITS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") AND, THEREFORE, MAY NOT BE SOLD, TRANSFERRED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR AN EXEMPTION FROM REGISTRATION THEREUNDER AND DELIVERY TO THE ISSUER OF AN OPINION OF COUNSEL THAT (AMONG OTHER MATTERS) SUCH SALE, TRANSFER OR OTHER DISPOSITION IS EXEMPT FROM REGISTRATION UNDER THE SECURITIES ACT."

(d) Article 8 Election. All membership interests shall be "securities" governed by Article 8 of the Uniform Commercial Code in any jurisdiction (a) that has adopted revisions to Article 8 of the Uniform Commercial Code substantially consistent with the 1994 revisions to Article 8 adopted by the American Law Institute and the National Conference of Commissioners on Uniform State Laws and (b) the laws of which may be applicable, from time to time, to the issues of perfection, the effect of perfection or non-perfection and the priority of a security interest in the membership interests of the Company. Each certificate evidencing membership interests shall bear the following legend: "This certificate evidences membership interests in Commnet Midwest, LLC and shall be a security for purposes of Article 8 of the Uniform Commercial Code."

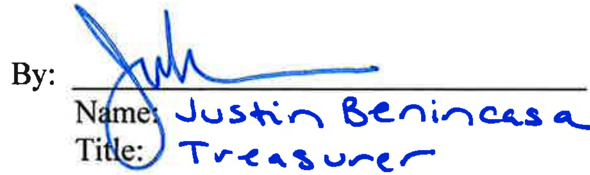
25. Pledge of Units. The Member and the Company (a) consent to such pledges of Units by the Member as the Member shall deem necessary pursuant to the obligations of the Member under any loan or credit agreement, and (b) agrees that no assignment of an interest in the Company shall effect a termination or dissolution of the Company.

26. Integration. This Agreement constitutes the entire agreement among the parties hereto pertaining to the subject matter hereof and supersedes all prior agreements and understandings pertaining thereto.

[Signature page follows.]

IN WITNESS WHEREOF, the undersigned have duly executed this Limited Liability Company Agreement as of the date set forth above.

COMMNET WIRELESS, LLC
its Sole Member



By: ____________________________
Name: Justin Benincasa
Title: Treasurer

Exhibit A

Capital Contributions; Ownership of Units

Member	Capital Contribution	Date of Capital Contribution	Units Held
Commnet Wireless, LLC	$100.00	October 3, 2018	100

Francine Giani
Executive Director
Department of Commerce

Gary Herbert
Governor
State of Utah

Jason Sterzer
Director
Division of Corporations
& Commercial Code

STATE OF UTAH
DEPARTMENT OF COMMERCE
DIVISION OF CORPORATIONS & COMMERCIAL CODE
CERTIFICATE OF REGISTRATION

COGENCY GLOBAL INC.
COMMNET RURAL AMERICA, LLC
2005 EAST 2700 SOUTH STE 200
SALT LAKE CITY UT 84109

Access Code
Code: 6152814

State of Utah
Department of Commerce
Division of Corporations & Commercial Code

CERTIFICATE OF REGISTRATION

LLC - Foreign

This certifies that **COMMNET RURAL AMERICA, LLC** has been filed and approved on **June 07, 2019** and has been issued the registration number **11334197-0161** in the office of the Division and hereby issues this Certification thereof.

JASON STERZER
Division Director

*The Access Code is used for Online Applications used by this Division only.

State of Utah
Department of Commerce
Division of Corporations & Commercial Code
Foreign Registration Statement (Foreign Limited Liability Company)

Date: 06/07/2019
Receipt Number: 7874120
Amount Paid: $340.30

EXPEDITE

RECEIVED
JUN 07 2019
Utah Div. of Corp. & Comm. Code

Important: Read instructions before completing form — **Non-Refundable Processing Fee: $70.00**

1. Exact Name of Foreign Limited Liability Company:	COMMNET RURAL AMERICA, LLC
2. Jurisdiction of Formation:	DELAWARE
3. Principal office address:	400 NORTHRIDGE RD, SUITE 1100 (Address) — ATLANTA (City) — GA (State) — 30350 (Zip)

4. The name of the Registered Agent (Individual or Business Entity or Commercial Registered Agent):
COGENCY GLOBAL INC.

The address must be listed if you have a non-commercial registered agent. See instructions for further details.

Address of the Registered Agent:
Utah Street Address Required, PO Boxes can be listed after the Street Address

City: **State UT** **Zip:**

5. The Limited Liability Company shall use as its name in Utah:
COMMNET RURAL AMERICA, LLC
Must be the same as number (1) unless the name is not available or permitted in Utah.

6. Purpose of the Limited Liability Company: (optional) TELECOMMUNICATIONS

7. Managers/Members of the Limited Liability Company: (optional)

Position	Name	Address	City	State	Zip
MANAGER:					
MANAGER:					
MEMBER:					
MEMBER:					

Under penalties of perjury, I declare that this application for authority to transact business has been examined by me and is, to the best of my knowledge and belief, true, correct and complete.

Authorized Signature: [signature] Name & Title: MARY M. MABEY, SECRETARY

Under GRAMA {63-2-201}, all registration information maintained by the Division is classified as public record. For confidentiality purposes, you may use the business entity physical address rather than the residential or private address of any individual affiliated with the entity.

Optional Inclusion of Ownership Information: This information is not required.

Is this a female owned business? Yes ☐ No ☐
Is this a minority owned business? Yes ☐ No ☐ yes, please specify: Select/Type the race of the owner here

Mailing/Faxing Information: www.corporations.utah.gov/contactus.html Division's Website: www.corporations.utah.gov

State of Utah
Department of Commerce
Division of Corporations and Commercial Code
I hereby certified that the foregoing has been filed and approved on this 7 day of Jun 20 19 in this office of this Division and hereby issued This Certificate thereof.

Examiner MW Date 6-10-19

Jason Sterzer
Division Director

JUN 7'19 PM3:25

01/14

11334197-0161

EXHIBIT B

Managerial and Technical Qualifications

Joseph Moravec

Mr. Moravec joined ATN in January of 2017 as President of US Telecom. He has over two decades experience in a large carrier environment at Verizon Wireless, and one of its predecessors, GTE. Among his recent positions, Mr. Moravec was Chief Financial Officer Field Operations and Chief Financial Officer—South Area at Verizon. During his career Joe spent time both in field or regional positions and financial planning and analysis positions at headquarters. While he enjoyed a very successful career at Verizon, Mr. Moravec was eager to come into a smaller, more entrepreneurial environment at ATN. Besides his experience and larger carrier perspective, Mr. Moravec is a high energy person who enjoys managing in a team oriented culture.

Mr. Moravec earned an undergraduate degree in engineering (EE) at Cornell and earned an MBA from Penn State.

Mark Hlavek

Mark Hlavek is our Chief Financial Officer. Mr. Hlavek has spent the past 12 years in the telecom industry in various accounting leadership roles. He is responsible for the oversight of all accounting operations and systems as well as the financial reporting and treasury management at Commnet Wireless. Prior to joining Commnet Wireless, Mr. Hlavek served as Director of Technical Accounting and Director of Revenue Programs during his tenure with Cingular Wireless from 2003 to 2007. Mr. Hlavek has also worked in the SEC Reporting group at Glenayre Technologies from 2001 to 2003 and as the Director of Accounting Information Systems and various accounting and finance positions at World Access from 1996 to 2001. He is a Certified Public Accountant and spent the beginning of his professional career with Ernst & Young. Mr. Hlavek holds a degree in Accounting and Business from Flagler College.

Ken Borner

Ken Borner is our Vice President of Engineering & Operations. Mr. Borner has served as a Vice President of Engineering & Operations at Commnet Wireless LLC since April 2007. Mr. Borner is responsible for overseeing the engineering, technology development, and network operations teams. Mr. Borner has served for 25 years in the wireless industry in various technical and leadership roles. Prior to Commnet Wireless, Mr. Borner served as a Senior Director of Engineering and Operations at Midwest Region for U.S. Cellular. During his tenure at U.S. Cellular, the Midwest Region was consistently recognized by its customers and by J.D Power

and Associates for superior network quality. He joined U.S. Cellular in 2002 through the Chicago MTA acquisition from PrimeCo Personal Communications, where he served as a Technical Director since 1996, and was instrumental in launching the first CDMA network in the PCS band. From 1984 to 1996, he held a variety of operations and leadership positions at GTE Airfone. He holds a Degree in Aviation Technology and Management from Southern Illinois University.

Jeffrey Humiston

Jeff Humiston is our SVP – Strategy. Mr. Humiston has over 15 years of telecom experience and in his current role he is responsible for business development, government programs, strategy and planning for Commnet Wireless. Prior to joining Commnet, Mr. Humiston served as General Counsel to Allied Wireless Communications Corporation d/b/a Alltel Wireless where he was responsible for all legal and regulatory matters for the company as well as advising the executive team on various strategic initiatives. Mr. Humiston also served various corporate legal functions for Alltel Corporation from 2002 to 2010. Mr. Humiston holds a Bachelor of Arts degree from Hendrix College and a Juris Doctor degree from the UA Little Rock Bowen School of Law.

Justin D. Benincasa

Justin D. Benincasa is our Chief Financial Officer and Treasurer. Prior to joining us in May 2006, Mr. Benincasa was a Principal at Windover Development, LLC since 2004. From 1998 to 2004, he was Executive Vice President of Finance and Administration at American Tower Corporation, a leading wireless and broadcast communications infrastructure company, where he managed finance and accounting, treasury, IT, tax, lease administration and property management. Prior to that, he was Vice President and Corporate Controller at American Radio Systems Corporation and held accounting and finance positions at American Cablesystems Corporation. Mr. Benincasa holds an M.B.A. degree from Bentley University and a B.A. degree from the University of Massachusetts.

Andrew S. Fienberg

Andrew S. Fienberg joined us in May 2005 as our Vice President of Accounting. Prior to joining us, Mr. Fienberg served as a Divisional Controller for Pegasus Satellite Television, Inc., a re-seller of DirecTV services throughout the rural United States, which he joined in December 2003. From August 1999 to December 2003, Mr. Fienberg was the Corporate

Controller at iBasis, Inc., a publicly-traded international VoIP telecommunications service provider. Prior to iBasis, Mr. Fienberg was with Iron Mountain Incorporated, a data storage provider, which he joined in May 1997. Prior to iBasis, he served as an auditor at BDO Seidman, LLP in Boston beginning in September 1989. Mr. Fienberg received a B.S. degree in Accountancy from Bentley College.

Michele A. Satrowsky

Michele Satrowsky is Vice President and Corporate Treasurer at ATN International. Ms. Satrowsky has over twenty years of merger & acquisition and capital markets experience. She has held positions with investment banks Morgan Stanley and Cowen & Company as vice president of Technology Banking and in the private sector with Panera Bread and Raytheon Company as vice president of treasury and corporate development responsible for mergers & acquisitions. Ms. Satrowsky holds an MBA from Boston University's Questrom School of Business and a BS in Finance from the University of Massachusetts – Amherst.

Clay McInnish

Clay McInnish is our Controller. Mr. McInnish has spent the past 17 years in the telecom industry in various accounting leadership roles. He is responsible for the oversight of all accounting operations for various ATN International subsidiaries. Prior to joining ATN International, Mr. McInnish served as Senior Manager of Revenue Accounting during his tenure with Cingular Wireless / AT&T from 2001 to 2011. Mr. McInnish has also worked as the Accounting Manager from 1998 to 2001 at ERC Parts, Inc. He is a Certified Public Accountant and holds a degree in Accounting from Shorter University.

EXHIBIT C

Financial Statements

ATN INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULE
December 31, 2018, 2017 and 2016

INDEX

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	F-2
FINANCIAL STATEMENTS	
Consolidated Balance Sheets—December 31, 2018 and 2017	F-4
Consolidated Income Statements for the Years Ended December 31, 2018, 2017 and 2016	F-5
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2018, 2017 and 2016	F-6
Consolidated Statements of Equity for the Years Ended December 31, 2018, 2017 and 2016	F-7
Consolidated Statements of Cash Flows for the Years Ended December 31, 2018, 2017 and 2016	F-8
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS	F-9
FINANCIAL STATEMENT SCHEDULE	
Schedule II—Valuation and Qualifying Accounts for the Years Ended December 31, 2018, 2017 and 2016	F-59

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
ATN International, Inc.:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of ATN International, Inc. and its subsidiaries ("the Company") as of December 31, 2018 and 2017, and the related consolidated income statements, statements of comprehensive income, of equity, and of cash flows for each of the three years in the period ended December 31, 2018, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018 based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for revenues from contracts with customers in 2018.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/PricewaterhouseCoopers LLP

Boston, Massachusetts
February 28, 2019

We have served as the Company's auditor since 2002.

ATN INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

December 31, 2018 and 2017

(In Thousands, Except Share Data)

	December 31, 2018	December 31, 2017
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 191,836	$ 207,956
Restricted cash	1,071	833
Short-term investments	393	7,076
Accounts receivable, net of allowances of $16.5 million and $15.0 million, respectively	38,305	43,529
Inventory, materials and supplies	6,305	15,398
Prepayments and other current assets	37,855	68,136
Total current assets	275,765	342,928
Fixed Assets:		
Property, plant and equipment	1,188,916	1,169,806
Less accumulated depreciation	(562,064)	(526,660)
Net fixed assets	626,852	643,146
Telecommunication licenses, net	93,686	95,952
Goodwill	63,970	63,970
Customer relationships, net	9,323	11,734
Restricted cash	—	11,101
Other assets	37,708	36,774
Total assets	$ 1,107,304	$ 1,205,605
LIABILITIES AND EQUITY		
Current Liabilities:		
Current portion of long-term debt	$ 4,688	$ 10,919
Accounts payable and accrued liabilities	80,873	116,133
Dividends payable	2,720	2,724
Accrued taxes	31,795	6,751
Advance payments and deposits	20,574	25,178
Total current liabilities	140,650	161,705
Deferred income taxes	10,276	31,732
Other liabilities	46,760	37,072
Long-term debt, excluding current portion	86,294	144,873
Total liabilities	283,980	375,382
Commitments and contingencies (Note 14)		
ATN International, Inc. Stockholders' Equity:		
Preferred stock, $0.01 par value per share; 10,000,000 shares authorized, none issued and outstanding	—	—
Common stock, $0.01 par value per share; 50,000,000 shares authorized; 17,274,215 and 17,102,530 shares issued, respectively, 16,002,699 and 16,025,745 shares outstanding respectively	172	170
Treasury stock, at cost; 1,271,516 and 1,076,785 shares, respectively	(48,547)	(36,110)
Additional paid-in capital	181,778	167,973
Retained earnings	563,593	552,948
Accumulated other comprehensive income	(1,609)	3,746
Total ATN International, Inc. stockholders' equity	695,387	688,727
Non-controlling interests	127,937	141,496
Total equity	823,324	830,223
Total liabilities and equity	$ 1,107,304	$ 1,205,605

The accompanying notes are an integral part of these consolidated financial statements.

ATN INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED INCOME STATEMENTS

For the Years Ended December 31, 2018, 2017 and 2016

(In Thousands, Except Per Share Data)

	December 31,		
	2018	2017	2016
REVENUE:			
Wireless	$ 198,824	$ 232,501	$ 244,404
Wireline	230,225	227,827	190,598
Renewable energy	22,158	20,865	22,001
Total revenue	451,207	481,193	457,003
OPERATING EXPENSES *(excluding depreciation and amortization unless otherwise indicated)*:			
Termination and access fees	114,478	120,624	126,443
Engineering and operations	73,031	74,614	60,414
Sales, marketing and customer service	35,207	35,184	30,253
General and administrative	104,267	102,294	90,431
Transaction-related charges	2,642	1,009	18,064
Restructuring charges	515	1,169	—
Depreciation and amortization	85,719	86,934	75,980
Impairment of intangible assets	—	—	11,425
Bargain purchase gain	—	—	(7,304)
(Gain) loss on disposition of long-lived assets	(26,425)	101	27
Loss on damaged assets and other hurricane related charges, net of insurance recovery	750	3,956	—
Total operating expenses	390,184	425,885	405,733
Income from operations	61,023	55,308	51,270
OTHER INCOME (EXPENSE)			
Interest income	1,811	1,613	1,239
Interest expense	(7,973)	(8,838)	(5,362)
Loss on deconsolidation of subsidiary	—	(529)	—
Other expenses	(1,119)	(1)	(1,773)
Other expense, net	(7,281)	(7,755)	(5,896)
INCOME BEFORE INCOME TAXES	53,742	47,553	45,374
Income tax provisions (benefit)	18,870	(1,341)	21,160
NET INCOME	34,872	48,894	24,214
Net income attributable to non-controlling interests, net of tax expense of $1.5 million, $1.0 million, and $1.3 million, respectively.	(15,057)	(17,406)	(12,113)
NET INCOME ATTRIBUTABLE TO ATN INTERNATIONAL, INC. STOCKHOLDERS	$ 19,815	$ 31,488	$ 12,101
NET INCOME PER WEIGHTED AVERAGE SHARE ATTRIBUTABLE TO ATN INTERNATIONAL, INC. STOCKHOLDERS:			
Basic	1.24	1.95	0.75
Diluted	1.24	1.94	0.75
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING:			
Basic	15,988	16,138	16,131
Diluted	16,042	16,210	16,227
DIVIDENDS PER SHARE APPLICABLE TO COMMON STOCK	$ 0.68	$ 1.02	$ 1.32

The accompanying notes are an integral part of these consolidated financial statements.

ATN INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the Years Ended December 31, 2018, 2017, and 2016

(in thousands)

	Year Ended December 31,		
	2018	**2017**	**2016**
Net income	$ 34,872	$ 48,894	$ 24,214
Other comprehensive income:			
Foreign currency translation adjustment	(4,390)	1,265	(687)
Reclassifications of gains on sale of marketable securities to net income	—	(1,044)	—
Unrealized gain on securities	78	440	868
Projected pension benefit obligation, net of tax expense of $0.6 million, $0.7 million and $0.7 million	(840)	1,357	5,251
Other comprehensive income (loss), net of tax	(5,152)	2,018	5,432
Comprehensive income	29,720	50,912	29,646
Less: Comprehensive income attributable to non-controlling interests	(15,057)	(17,406)	(12,113)
Comprehensive income attributable to ATN International, Inc.	$ 14,663	$ 33,506	$ 17,533

The accompanying notes are an integral part of these consolidated financial statements.

ATN INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF EQUITY

For the Years Ended December 31, 2016, 2017, and 2018

(In Thousands, Except Share Data)

	Common Stock	Treasury Stock, at cost	Additional Paid In Capital	Retained Earnings	Accumulated Other Comprehensive Income/(Loss)	Total ATNI Stockholders' Equity	Non-Controlling Interests	Total Equity
Balance, December 31, 2015	$ 168	$ (18,254)	$ 154,768	$ 547,321	$ (3,704)	$ 680,299	$ 81,425	$ 761,724
Issuance of 100,005 restricted shares of common stock	—	—	(1)	—	—	(1)	—	(1)
Issuance of 43,053 shares of common stock upon exercise of stock options	1	—	1,408	—	—	1,409	—	1,409
Purchase of 70,686 shares of common stock	—	(4,873)	—	—	—	(4,873)	—	(4,873)
Stock-based compensation	—	—	6,440	—	—	6,440	—	6,440
Dividends declared on common stock	—	—	—	(21,313)	—	(21,313)	(8,848)	(30,161)
Excess tax benefits from share-based compensation	—	—	592	—	—	592	—	592
Non-controlling interest in equity acquired	—	—	(4,106)	—	—	(4,106)	29,998	25,892
Investments made by minority shareholders	—	—	—	—	—	—	22,409	22,409
Deconsolidation of subsidiary	—	—	—	—	—	—	(310)	(310)
Repurchase of non-controlling interests	—	—	1,075	—	—	1,075	(4,673)	(3,598)
Comprehensive income:								—
Net income	—	—	—	12,101	—	12,101	12,113	24,214
Other comprehensive loss, net of tax of $677	—	—	—	—	5,432	5,432	—	5,432
Total comprehensive income	—	—	—	—	—	17,533	12,113	29,646
Balance, December 31, 2016	169	(23,127)	160,176	538,109	1,728	677,055	132,114	809,169
Issuance of 95,095 restricted shares of common stock	1	—	—	—	—	1	—	1
Issuance of 35,081 shares of common stock upon exercise of stock options	—	—	1,156	—	—	1,156	—	1,156
Purchase of 234,746 shares of common stock	—	(12,983)	—	—	—	(12,983)	—	(12,983)
Stock-based compensation	—	—	6,970	—	—	6,970	—	6,970
Dividends declared on common stock	—	—	—	(16,465)	—	(16,465)	(7,318)	(23,783)
Investments made by minority shareholders	—	—	—	—	—	—	123	123
Deconsolidation of subsidiary	—	—	—	—	—	—	529	529
Repurchase of non-controlling interests	—	—	(670)	—	—	(670)	(1,356)	(2,026)
Cumulative effect adjustment due to adoption of new accounting pronouncements	—	—	341	(186)	—	155	—	155
Comprehensive income:								
Net income	—	—	—	31,490	—	31,490	17,404	48,894
Other comprehensive loss, net of tax of $679	—	—	—	—	2,018	2,018	—	2,018
Total comprehensive income	—	—	—	—	—	33,508	17,404	50,912
Balance, December 31, 2017	170	(36,110)	167,973	552,948	3,746	688,727	141,496	830,223
Issuance of 13,664 restricted shares of common stock	2	—	—	—	—	2	—	2
Issuance of 158,021 shares of common stock upon exercise of stock options	—	—	6,319	—	—	6,319	—	6,319
Purchase of 171,907 shares of common stock	—	(12,437)	—	—	—	(12,437)	—	(12,437)
Stock-based compensation	—	—	6,420	—	—	6,420	—	6,420
Dividends declared on common stock	—	—	—	(10,863)	—	(10,863)	(19,033)	(29,896)
Repurchase of non-controlling interests	—	—	1,066	—	—	1,066	(10,729)	(9,663)
Cumulative effect adjustment due to adoption of new accounting pronouncements	—	—		1,693	(203)	1,490	1,146	2,636
Comprehensive income:								
Net income	—	—	—	19,815	—	19,815	15,057	34,872
Other comprehensive loss, net of tax of $637	—	—	—	—	(5,152)	(5,152)	—	(5,152)
Total comprehensive income	—	—	—	—	—	14,663	15,057	29,720
Balance, December 31, 2018	$ 172	$ (48,547)	$ 181,778	$ 563,593	$ (1,609)	$ 695,387	$ 127,937	$ 823,324

The accompanying notes are an integral part of these consolidated financial statements.

ATN INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the Years Ended December 31, 2018, 2017 and 2016

(In Thousands)

	Year Ended December 31,		
	2018	2017	2016
Cash flows from operating activities:			
Net income	$ 34,872	$ 48,894	$ 24,214
Adjustments to reconcile net income to net cash flows provided by operating activities:			
Depreciation and amortization	85,719	86,934	75,980
Provision for doubtful accounts	5,134	3,993	2,454
Amortization and write off of debt discount and debt issuance costs	763	670	505
Stock-based compensation	6,420	6,977	6,410
Unrealized loss on foreign currency	1,342	(1,209)	—
Deferred income taxes	(23,242)	(13,505)	(5,636)
Loss on equity method investments	—	2,033	—
Bargain purchase gain	—	—	(7,304)
Loss on damaged assets from Hurricanes	—	35,443	—
Insurance recovery related to hurricane claims	—	(34,606)	—
(Gain) Loss on disposition of long-lived assets	(26,425)	101	27
Gain on sale of investments	—	(826)	—
Impairment of long-lived assets	—	—	11,425
Pension funding required by Viya acquisition	—	—	(22,494)
Loss on deconsolidation of subsidiary	—	529	—
Other non-cash activity	308	424	566
Changes in operating assets and liabilities, excluding the effects of acquisitions and dispositions:			
Accounts receivable	(1,682)	(4,074)	2,601
Materials and supplies, prepayments, and other current assets	5,924	1,002	(8,410)
Prepaid income taxes	3,147	996	—
Accounts payable and accrued liabilities, advance payments and deposits and other current liabilities	(7,044)	4,649	6,522
Accrued taxes	29,089	(1,385)	21,547
Other assets	(238)	4,102	(12,122)
Other liabilities	1,778	4,583	15,371
Net cash provided by operating activities	115,865	145,725	111,656
Cash flows from investing activities:			
Capital expenditures	(105,769)	(133,786)	(124,282)
Hurricane rebuild capital expenditures	(80,152)	(8,585)	—
Hurricane insurance proceeds	34,606	—	—
Receipt of government grants	5,400	—	—
Purchase of strategic investments	(3,000)	(18,107)	(2,000)
Divestiture of businesses, net of transferred cash of $11.5 million and $2.1 million, respectively	48,270	22,381	—
Acquisition of businesses, net of acquired cash of $0.0 million and $12.6 million, respectively	—	(1,183)	(146,395)
Purchases of spectrum licenses and other intangible assets, including deposits	—	(36,832)	(10,860)
Acquisition of non-controlling interest in subsidiary	—	—	(7,045)
Purchase of short-term investments	(138)	—	(7,422)
Proceeds from sale of investments	6,564	3,794	—
Proceeds from disposition of long-lived assets	6,900	—	1,424
Net cash used in investing activities	(87,319)	(172,318)	(296,580)
Cash flows from financing activities:			
Dividends paid on common stock	(10,866)	(19,227)	(20,965)
Proceeds from new borrowings	—	8,571	125,800
Distribution to non-controlling interests	(18,780)	(6,858)	(8,632)
Payment of debt issuance costs	—	(326)	(2,763)
Proceeds from stock option exercises	72	1,030	649
Principal repayments of term loan	(9,795)	(9,355)	(33,564)
Repurchase of common stock	(6,198)	(12,855)	(4,114)
Acquisition of businesses, net of acquired cash of $0.0 million	—	(1,178)	—
Repurchases of non-controlling interests	(9,663)	(2,025)	(3,485)
Investments made by minority shareholders in consolidated affiliates	—	122	22,408
Net cash used in provided by financing activities	(55,230)	(42,101)	75,334
Effect of foreign currency exchange rates on cash and cash equivalents	(299)	226	(626)
Net change in cash, cash equivalents, and restricted cash	(26,983)	(68,468)	(110,216)
Total cash, cash equivalents, and restricted cash, beginning of period	219,890	288,358	398,574
Total cash, cash equivalents, and restricted cash, end of period	$ 192,907	$ 219,890	$ 288,358
Supplemental cash flow information:			
Interest paid	$ 7,235	$ 7,411	$ 4,451
Taxes paid	$ 12,486	$ 13,685	$ 8,237
Dividends declared, not paid	$ 2,720	$ 2,724	$ 5,487
Noncash investing activity:			
Transfer from inventory, materials and supplies to property, plant and equipment	$ 6,708	$ —	$ —
Purchases of property, plant and equipment included in accounts payable and accrued expenses	$ 12,877	$ 19,466	$ 16,847

The accompanying notes are an integral part of these consolidated financial statements.

1. ORGANIZATION AND BUSINESS OPERATIONS

The Company is a holding company that, directly and through its subsidiaries, owns and operates telecommunications and renewable energy businesses in North America, India, Bermuda and the Caribbean. The Company was incorporated in Delaware in 1987, began trading publicly in 1991 and spun off more than a half of its operations to stockholders in 1998. Since that time, the Company has engaged in many strategic acquisitions and investments to help grow its operations, using the cash generated from its established operating units to re-invest in its existing businesses and to make strategic investments in earlier stage businesses. The Company looks for businesses that offer growth opportunities or potential strategic benefits, but that required additional capital investment in order to execute on their business plans. The Company holds controlling positions with respect to some of its investments and minority positions in others. These strategic investments frequently offer a product and service development component in addition to the prospects of generating returns on invested capital. The Company has identified three operating segments to manage and review its operations, and to facilitate investor presentations of its results, as follows:

- ***U.S. Telecom*** In the United States, the Company offers wireless and wireline services. The Company offers wholesale wireless voice and data roaming services to national, regional, local and selected international wireless carriers in rural markets located principally in the Southwest and Midwest United States. The Company also provides retail wireless, wireline services and wholesale long-distance voice services to telecommunications carriers in the areas in which it offers wireline services.

- ***International Telecom.*** The Company's international wireless services include voice and data services to retail customers in Bermuda, Guyana and the U.S. Virgin Islands. The Company's international wireline services include voice and data services in Bermuda, the Cayman Islands, Guyana and the U.S. Virgin Islands, as well as video services in Bermuda, the Cayman Islands, and the U.S Virgin Islands. In addition, the Company offers wholesale long-distance voice services to other telecommunications carriers in the countries in which it offers international wireline services.

- ***Renewable Energy.*** In India, the Company provides distributed generation solar power to corporate, utility and municipal customers. Through November 6, 2018, the Company also provided distributed generation solar power in the United States in Massachusetts, California and New Jersey.

The following chart summarizes the operating activities of the Company's principal subsidiaries, the segments in which it reports its revenue and the markets it served as of December 31, 2018:

Segment	Services	Markets	Tradenames
U.S. Telecom	Wireless	United States (rural markets)	Choice, Choice NTUA Wireless, Commnet, WestNet, Geoverse
	Wireline	United States	Essextel, Deploycom
International Telecom	Wireline	Bermuda, Cayman Islands, Guyana, U.S. Virgin Islands	Fireminds, GTT+, One, Logic, Viya
	Wireless	Bermuda, Guyana, U.S. Virgin Islands	GTT+, One, Viya
	Video Services	Bermuda, Cayman Islands, U.S. Virgin Islands	Logic, One, Viya
Renewable Energy	Solar	India	Vibrant Energy

The Company actively evaluates potential acquisitions, investment opportunities and other strategic transactions, both domestic and international, that meet its return on investment and other criteria. In addition, the Company considers non-controlling investments in earlier stage businesses that it considers strategically relevant, and which may offer long-term growth potential for the Company, either individually, or as research and development businesses that can support the Company's operating subsidiaries in new product and service development and offerings.

The Company provides management, technical, financial, regulatory, and marketing services to its subsidiaries and typically receives a management fee equal to a percentage of their revenues, which is eliminated in consolidation. For information about the Company's financial segments and geographical information about its operating revenues and assets see Notes 1 and 17 to the Consolidated Financial Statements included in this Report.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The consolidated financial statements include the accounts of the Company, its majority-owned subsidiaries and certain entities, which are consolidated in accordance with the provisions of the Financial Accounting Standards Board's ("FASB") authoritative guidance on the consolidation of variable interest entities since it is determined that the Company is the primary beneficiary of these entities.

Certain reclassifications have been made in the December 31, 2016 financial statements to conform to the Company's consolidated income statements to how it analyzes its operations in the current period. These changes did not impact operating income. For the year ended December 31, 2016 the aggregate impact of the changes included a decrease to termination and access fees of $4.9 million, an increase to engineering and operations expenses of $7.5 million, a decrease to sales and marketing expenses of $0.8 million, an increase to equipment expense of $0.6 million and a decrease to general and administrative expenses of $2.4 million.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenue and expenses during the reporting periods. The most significant estimates relate to the allowance for doubtful accounts, useful lives of the Company's fixed and finite-lived intangible assets, allocation of purchase price to assets acquired and liabilities assumed in business combinations, fair value of indefinite-lived intangible assets, goodwill and income taxes. Actual results could differ significantly from those estimates.

Cash and Cash Equivalents

The Company considers all investments with an original maturity of three months or less at date of purchase to be cash equivalents. The Company places its cash and temporary investments with banks and other institutions that it believes have a high credit quality. At December 31, 2018, the Company had deposits with banks in excess of FDIC insured limits and $25.2 million of its cash is on deposit with noninsured institutions such as corporate money market issuers and cash held in foreign banks. The Company's cash and cash equivalents are not subject to any restrictions (see Note 9). As of December 31, 2018 and 2017, the Company held $7.5 million and $12.6 million, respectively, of its cash in Guyana dollars. While there are risks associated with the conversion of Guyana dollars to U.S. dollars due to limited liquidity in the Guyana foreign currency markets, to date it has not prevented the Company from converting Guyana dollars into U.S. dollars within a given three month period or from converting at a price that reasonably approximates the reported exchange rate.

Short Term Investments

The Company's short-term investments consist of corporate bonds, which have remaining maturities of more than three months at the date of purchase, and equity securities classified as available for sale, which are stated at fair value. Unrealized gains and losses are recorded in other income. The estimated fair values of investments are based on quoted market prices as of the end of the reporting period.

Restricted Cash

The Company generally classifies cash that is legally restricted as to withdrawal or usage as restricted cash. Generally, the cash is restricted due to debt service obligations, acquisitions, or to support the Company's telecommunications operations. In 2018, the Company disposed of $8.4 million of restricted cash as a result of the U.S. Solar Transaction described in Note 4.

Allowance for Doubtful Accounts

The Company maintains an allowance for doubtful accounts for the estimated probable losses on uncollectible accounts receivable. The allowance is based upon a number of factors including the credit worthiness of customers, the Company's historical experience with customers, the age of the receivable and current market and economic conditions. Such factors are reviewed and updated by the Company on a quarterly basis. Uncollectible amounts are charged against the allowance account.

Inventory, Materials and Supplies

Inventory, materials and supplies primarily include handsets and other equipment held for sale to customers. These balances are recorded at the lower of cost or market cost being determined on the basis of specific identification and market determined using replacement.

Fixed Assets

The Company's fixed assets are recorded at cost and depreciated using the straight-line method generally between 3 and 39 years. Expenditures for major renewals and betterments that extend the useful lives of fixed assets are capitalized. Repairs and replacements of minor items of property are charged to maintenance expense as incurred. The cost of fixed assets in service and under construction includes an allocation of indirect costs applicable to construction. Grants received for the construction of assets are recognized as a reduction of the cost of fixed assets, a reduction of depreciation expense over the useful lives of the assets and as a reduction of capital expenditures in the statements of cash flows.

The fair value of a liability for an asset retirement obligation is recorded in the period in which it is incurred if a reasonable estimate of fair value can be made. In periods subsequent to initial measurement, period-to-period changes in the liability for an asset retirement obligation resulting from the passage of time and revisions to either the timing or the amount of the original estimate of undiscounted cash flows are recognized. The increase in the carrying value of the associated long-lived asset is depreciated over the corresponding estimated economic life. The consolidated balance sheets include accruals of $3.8 million and $3.9 million as of December 31, 2018 and 2017, respectively, for estimated costs associated with asset retirement obligations.

In accordance with the authoritative guidance for the accounting for the impairment or disposal of long-lived assets, the Company evaluates the carrying value of long-lived assets, including property and equipment, in relation to the operating performance and future undiscounted cash flows of the underlying business whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss exists when estimated undiscounted cash flows attributable to an asset are less than its carrying amount. If an asset is deemed to be impaired, the amount of the impairment loss recognized represents the excess of the asset's carrying value as compared to its estimated fair value, based on management's assumptions and projections.

Management's estimate of the future cash flows attributable to its long-lived assets and the fair value of its businesses involve significant uncertainty. Those estimates are based on management's assumptions of future results, growth trends and industry conditions. If those estimates are not met, the Company could have additional impairment charges in the future, and the amounts may be material.

The Company did not record any fixed asset impairments for the year ended December 31, 2018. See Note 3, *Impact of Hurricanes Irma and Maria*, regarding the Company's write off of certain damaged fixed assets. See Note 4,

Disposition- U.S. Telecom, regarding the Company's impairment of certain fixed assets in the year ended December 31, 2016.

Goodwill and Indefinite-Lived Intangible Assets

Goodwill is recognized in business combinations equal to the amount by which the cost of acquired net assets exceeded the fair value of those net assets on the date of acquisition. The Company allocates goodwill to reporting units at the time of acquisition and bases that allocation on which reporting units will benefit from the acquired assets and liabilities. Reporting units are defined as operating segments or one level below an operating segment, referred to as a component. The Company has determined that its reporting units are components of its multiple operating segments. The Company assesses goodwill for impairment on an annual basis in the fourth quarter or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. The assessment begins with a qualitative analysis to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount. If the reporting unit passes this analysis, the impairment assessment is complete and no impairment is recorded. If the reporting unit does not pass the analysis, the Company performs additional quantitative analysis by calculating the fair value of the reporting unit. If the fair value exceeds the carrying value, the test is complete and no impairment is recorded. If the carrying value of the reporting unit, including goodwill, exceeds the fair value of the reporting unit an impairment charge is recorded equal to the excess, but not more than the total amount of goodwill allocated to the reporting unit.

A significant majority of the Company's telecommunications licenses are not amortized and are carried at their historical costs. The Company believes that telecommunications licenses generally have an indefinite life based on the historical ability to renew such licenses, that such renewals may be obtained indefinitely and at little cost, and that the related technology used is not expected to be replaced in the foreseeable future. The Company has elected to perform its annual testing of its telecommunications licenses in the fourth quarter of each fiscal year, or more often if events or circumstances indicate that there may be impairment. If the value of these assets were impaired by some factor, such as an adverse change in the subsidiary's operating market, the Company may be required to record an impairment charge. The impairment test consists of a comparison of the fair value of telecommunications licenses with their carrying amount on a license by license basis and as a part of the test the Company assesses the appropriateness of the application of the indefinite-lived assertion.

As of December 31, 2018 and 2017, the Company performed its annual impairment assessment of its goodwill and indefinite-lived intangible assets (telecommunications licenses) and determined that no impairment charge was required. See Note 8 for a discussion of the Company's quantitative and qualitative tests of its goodwill. Also, see Note 4, *Disposition- U.S. Telecom,* regarding the Company's impairment of goodwill in the year ended December 31, 2016.

Other Intangible Assets

Intangible assets resulting from the acquisitions of entities accounted for using the purchase method of accounting are estimated by management based on the fair value of assets acquired. These include acquired customer relationships, tradenames, and franchise rights.

Customer relationships are amortized over their estimated lives ranging from 7-13 years, which are based on the pattern in which economic benefit of the customer relationship is estimated to be realized.

Debt

Debt is measured at amortized cost. Debt issuance costs on term loans and specified maturity borrowings are recorded as a reduction to the carrying value of the debt and are amortized as interest expense in the consolidated income statements over the period of the debt. Fees related to revolving credit facilities and lines of credit are recorded in other assets in the consolidated balance sheet and are amortized as interest expense in the consolidated income statements over the life of the facility. Except for interest costs incurred for the construction of a qualifying asset which are capitalized during the period the assets are prepared for their intended use, interest costs are expensed.

Non-Controlling Interests

The non-controlling interests in the accompanying consolidated balance sheets reflect the original investments and subsequent capital contributions made by the minority stockholders in the Company's subsidiaries which are less than wholly-owned. Non-controlling interests acquired in a business combination are initially recorded at fair value. Subsequently, all non-controlling interest is adjusted for the minority stockholder's proportional share of the earnings or losses, net of any distributions.

Changes in Accumulated Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss), by component, were as follows (in thousands):

	Projected Pension Benefit Obligation	Translation Adjustment	Other	Total
Balance at December 31, 2015	$ (3,481)	$ (223)	$ —	$ (3,704)
Adjust funded status of pension plan, net of tax of $0.7 million	5,251	—	—	5,251
Foreign currency translation adjustment	—	(687)	—	(687)
Unrealized gain on marketable securities	—	—	868	868
Balance at December 31, 2016	1,770	(910)	868	1,728
Adjust funded status of pension plan, net of tax of $0.7 million	1,357	—	—	1,357
Foreign currency translation adjustment	—	1,265	—	1,265
Reclassifications of gains on sale of marketable securities to net income	—	—	(1,044)	(1,044)
Unrealized gain on marketable securities	—	—	440	440
Balance at December 31, 2017	3,127	355	264	3,746
Adjust funded status of pension plan, net of tax of $0.6 million	(840)	—	—	(840)
Foreign currency translation adjustment	—	(4,390)	—	(4,390)
Adoption of ASU 2016-01	—	—	(203)	(203)
Interest rate swap	—	—	78	78
Balance at December 31, 2018	$ 2,287	$ (4,035)	$ 139	$ (1,609)

Amounts reclassified from accumulated other comprehensive income to net income were as follows (in thousands):

	2018	2017	2016
Pension and other postretirement benefit plans	$ 54	$ 716	$ 1,300
Realized gains on marketable securities	—	(1,044)	—
Total	$ 54	$ (328)	$ 1,300

Revenue Recognition

The Company earns revenue from its telecommunication and renewable energy operations. The Company recognizes revenue through the following steps:

- Identification of the contract with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognize revenue when, or as, the Company satisfies performance obligations

Revenue Recognition- Telecommunications

Wireless revenue consists of wholesale and retail revenue. Wholesale revenue is generated from providing mobile voice and data services to the customers of other wireless carriers, the provision of network switching services and certain transport services using the Company's wireless networks. The transaction price of some wholesale revenue contracts includes variable consideration in the form of volume discounts. Management uses its judgment based on projected transaction volumes to estimate the transaction price and to allocate the transaction price to the performance obligations in the contract. Revenue is recognized over time as the service is rendered to the customer. Retail revenue is generated from providing mobile voice and data services to subscribers as well as roaming services provided to other carriers' customers roaming into the Company's retail markets. This revenue is recognized over time as the service is rendered. Lastly, wireless revenue includes revenues from equipment sold to customers which is recognized when the equipment is delivered to the customer.

Management considers transactions where customers purchase subsidized or discounted equipment and mobile voice or data services to be a single contract. For these contracts, the transaction price is allocated to the equipment and mobile service based on their standalone selling prices. The standalone selling price is based on the amount the Company charges for the equipment and service to similar customers. Equipment revenue is recognized when the equipment is delivered to customers and service revenue is recognized as service is rendered.

Wireline revenue is generated from access and usage fees for internet, voice and video services charged to subscribers as well as wholesale long-distance voice services provided to telecommunication carriers at contracted rates. Revenue from these contracts is recognized over time as the service is rendered to the customer.

The Company's wireless and wireline contracts occasionally include promotional discounts such as free service periods or discounted products. If a contract contains a substantive termination penalty, the transaction price is allocated to the performance obligations based on standalone selling price resulting in accelerated revenue recognition and the establishment of a contract asset that will be recognized over the life of the contract. If a contract includes a promotional discount but no substantive termination penalty the discount is recorded in the promotional period and no contract asset is established. The Company's customers also have the option to purchase additional telecommunication services. Generally, these options are not performance obligations and are excluded from the transaction price because they do not provide the customers with a material right.

The Company may charge upfront fees for activation and installation of some of its products and services. These fees are reviewed to determine if they represent a separate performance obligation. If they are not a separate performance obligation, the contract price associated with them is recognized over the life of the customer. If the fees represent a performance obligation they are recognized when delivered to the customer based on standalone selling price.

Sales and use and state excise taxes collected from customers that are remitted to the governmental authorities are reported on a net basis and excluded from the revenues and sales.

Revenue Recognition-Renewable Energy

Revenue from the Company's Renewable Energy segment is generated from the sale of electricity through power purchase agreements ("PPAs") with various customers that generally range from 10 to 25 years. The Company recognizes revenue at contractual PPA rates over time as electricity is generated and simultaneously consumed by the customer. In the United States, the Company's Renewable Energy segment also generates revenue from the sale of Solar Renewable Energy Credits ("SRECs"). Revenue is recognized over time as SRECs are sold through long-term purchase agreements at the contractual rate specified in the agreement.

Contract Acquisition Costs

The Company pays sales commissions to its employees and agents for obtaining customer contracts. These costs are incremental because they would not have been incurred if the contract was not obtained. The Company recognizes an asset for these costs and subsequently amortizes the asset on a systematic basis consistent with the pattern of the transfer of the services to the customer. The amortization period, which is between 2 and 6 years, considers both the original contract period as well as anticipated contract renewals as appropriate. The amortization period also includes renewal commissions when those commissions are not commensurate with new commissions. The Company estimates contract renewals based on its actual renewals in recent periods. When the expected amortization period is one year or less the Company utilizes the practical expedient and expenses the costs as incurred.

Operating Expenses

Termination and access fee expenses. Termination and access fee expenses are charges that are incurred for voice and data transport circuits (in particular, the circuits between the Company's wireless sites and its switches), internet capacity, video programming costs, other access fees the Company pays to terminate its calls, telecommunication spectrum fees and direct costs associated with the Company's managed services and technology business as well as within its Renewable Energy segment. Termination and access fees also include the cost of handsets and customer resale equipment incurred by the Company's retail businesses.

Engineering and operations expenses. Engineering and operations expenses include the expenses associated with developing, operating and supporting the Company's expanding telecommunications networks and renewable energy operations, including the salaries and benefits paid to employees directly involved in the development and operation of the Company's networks and renewable energy operations.

Sales and marketing expenses. Sales and marketing expenses include salaries and benefits the Company pays to sales personnel, customer service expenses, sales commissions and the costs associated with the development and implementation of the Company's promotion and marketing campaigns.

General and administrative expenses. General and administrative expenses include salaries, benefits and related costs for general corporate functions including executive management, finance and administration, legal and regulatory, facilities, information technology and human resources. General and administrative expenses also include internal costs associated with the Company's performance of due-diligence in connection with acquisition activities.

Transaction-related charges. Transaction-related charges include the external costs, such as legal, tax, accounting and consulting fees directly associated with acquisition and disposition-related activities, which are expensed as incurred. Transaction-related charges do not include internal costs, such as employee salary and travel-related expenses, incurred in connection with acquisitions or dispositions or any integration-related costs.

Restructuring charges. Restructuring charges are costs incurred as a result of reorganizing the Company's operating from acquisition or disposition activities.

Depreciation and amortization expenses. Depreciation and amortization expenses represent the depreciation and amortization charges the Company records on its property and equipment and on certain intangible assets.

Impairment of intangible assets. The Company evaluates the carrying value of its long lived assets, including property and equipment, whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss exists when estimated undiscounted cash flows attributable to non-current assets subject to depreciation and amortization and discounted cash flows for intangible assets not subject to amortization are less than their carrying amount. For long lived assets other than goodwill, if an asset is deemed to be impaired, the amount of the impairment loss recognized represents the excess of the asset's carrying value as compared to its estimated fair value, based on management's assumptions and projections.

The Company also assesses the carrying value of goodwill and indefinite-lived intangible assets on an annual basis or more frequently if events or changes in circumstances indicate that the carrying value of goodwill may not be recoverable. The carrying value of each reporting unit, including goodwill assigned to that reporting unit, is compared to its fair value. If the carrying value of the reporting unit, including goodwill, exceeds the fair value of the reporting unit an impairment charge is recorded equal to the excess, but not more than the total amount of goodwill allocated to the reporting unit.

(Gain) loss on disposition of long-lived assets. The Company sells or disposes assets from time to time. A gain or loss is recorded by comparing the carrying amount of the assets to the proceeds received.

Loss on damaged assets and other Hurricane-related charges, net of insurance recovery. During September 2017, the Company's operations and customers in the U.S. Virgin Islands were severely impacted by Hurricanes Irma and Maria (the "Hurricanes"). Loss on damaged assets and other hurricane related charges, net of insurance recovery represents the write off of damaged assets, net of insurance recoveries and also includes additional operating expenses that were specifically incurred to address the impact of the Hurricanes.

Accounting for Grants

The Company receives funding from the U.S. Government and its agencies under Stimulus and Universal Service Fund and other programs. These funding programs are generally designed to fund telecommunications operations, and infrastructure expansion into rural or underserved areas. The funding programs are evaluated to determine if they represent funding related to revenue, capital expenditures, or operating activities. Funding for revenue and operating activities are recorded as revenue or contra expense in the Company's consolidated income statement as the services are provided. Funding for capital expenditures is recorded as a reduction to property, plant and equipment on the Company's consolidated balance sheets and a future reduction in depreciation expense in the consolidated income statements. Government funding related to revenue and operations are recorded as operating cash inflows and grants for capital expenditures are recorded as investing cash inflows.

The Company monitors government funding for grant requirements to ensure that conditions related to grants have been met and there is reasonable assurance that the Company will be able to retain the grant proceeds and to ensure that any contingencies that may arise from not meeting the conditions are appropriately recognized. See Note 10, *Government Grants*.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company recognizes deferred tax assets to the extent that the Company believes these assets are more likely than not to be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If the Company determines that it would be able to realize its

deferred tax assets in the future in excess of their net recorded amount, the Company would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

The Company records uncertain tax positions in accordance with ASC 740 on the basis of a two-step process whereby (1) the Company determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related authority. It is possible that the ultimate resolution of these uncertain matters may be greater or less than the amount that the Company estimated. If payment of these amounts proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period in which it is determined that the liabilities are no longer necessary. If the estimate of tax liabilities proves to be more than the ultimate assessment, a further charge to expense would result.

The Company recognizes interest and penalties related to unrecognized tax benefits within the income tax expense line in the accompanying consolidated statements of operations. Accrued interest and penalties are included within the related tax liability line in the consolidated balance sheets.

The Company does not provide for United States income taxes on earnings of foreign subsidiaries as such earnings are considered to be indefinitely reinvested. The Tax Cuts and Jobs Act of 2017 resulted in a one-time transition tax on the deemed repatriation of foreign earnings for federal tax purposes.

Credit Concentrations and Significant Customers

Historically, the Company has been dependent on a limited amount of customers for its wholesale roaming business. For the year ended December 31, 2018, one customer accounted for 11% of the Company's consolidated revenue. For the years ended December 31, 2017, two customers accounted for 13% and 10% of the Company's consolidated revenue. For the year ended December 31, 2016, two customers accounted for 14% and 12% of the Company's consolidated revenue.

As of December 31, 2018, no customer accounted for more than 10% of the Company's consolidated accounts receivable. As of December 31, 2017, one customer accounted for 18% of the Company's consolidated accounts receivable, net of allowances.

Foreign Currency Gains and Losses

The Company translate the assets and liabilities of its foreign subsidiaries from their respective functional currencies, primarily the Indian Rupee and the Guyana Dollar, to U.S. dollars at the appropriate spot rates as of the balance sheet date. Changes in the carrying value of these assets and liabilities attributable to fluctuations in spot rates are recognized in foreign currency translation adjustment, a component of accumulated other comprehensive income. Income statement accounts are translated using the monthly average exchange rates during the year.

Monetary assets and liabilities denominated in a currency that is different from a reporting entity's functional currency must first be remeasured from the applicable currency to the legal entity's functional currency. The effect of this remeasurement process is reported in other income on the income statement.

Employee Benefit Plans

The Company sponsors pension and other postretirement benefit plans for employees of certain subsidiaries. Net periodic pension expense is recognized in the Company's income statement. The service cost component of net periodic pension expense is presented with other employee compensation within income from operations. Other components of net periodic pension expense, such as interest cost, expected return on plan assets, and amortization of actuarial gains and losses are presented in other income. The Company recognizes a pension or other postretirement benefit plan's funded status as either an asset or liability in its consolidated balance sheet. Actuarial gains and losses are

deferred, reported as a component of other comprehensive income, and amortized through net periodic pension expense in subsequent periods.

Fair Value of Financial Instruments

In accordance with the provisions of fair value accounting, a fair value measurement assumes that a transaction to sell an asset or transfer a liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability and defines fair value based upon an exit price model.

The fair value measurement guidance establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The guidance describes three levels of inputs that may be used to measure fair value:

Level 1 Quoted prices in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset and liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. Level 1 assets and liabilities include money market funds, debt and equity securities and derivative contracts that are traded in an active exchange market.

Level 2 Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities include debt securities with quoted prices that are traded less frequently than exchange-traded instruments and derivative contracts whose value is determined using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data. This category generally includes corporate obligations and non-exchange traded derivative contracts.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments and intangible assets that have been impaired whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Assets and liabilities of the Company measured at fair value on a recurring basis as of December 31, 2018 and 2017 are summarized as follows:

	December 31, 2018		
Description	**Quoted Prices in Active Markets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Total**
Certificates of deposit	$ —	$ 380	$ 380
Money market funds	2,266	—	2,266
Short term investments	393	—	393
Commercial paper	—	13,972	13,972
Interest rate swap	—	140	140
Total assets and liabilities measured at fair value	$ 2,659	$ 14,492	$ 17,151

Description	December 31, 2017 Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Total
Certificates of deposit	$ —	$ 391	$ 391
Money market funds	2,894	—	2,894
Short term investments	555	6,521	7,076
Commercial paper	—	49,954	49,954
Interest rate swap	—	52	52
Total assets and liabilities measured at fair value	$ 3,449	$ 56,918	$ 60,367

Certificate of Deposit

As of December 31, 2018 and December 31, 2017 this asset class consisted of a time deposit at a financial institution denominated in U.S. dollars. The asset class is classified within Level 2 of the fair value hierarchy because the fair value was based on observable market data.

Money Market Funds

As of December 31, 2018 and December 31, 2017, this asset class consisted of a money market portfolio that comprises Federal government and U.S. Treasury securities. The asset class is classified within Level 1 of the fair value hierarchy because its underlying investments are valued using quoted market prices in active markets for identical assets.

Short Term Investments and Commercial Paper

As of December 31, 2018 and December 31, 2017, these asset classes consisted of short term foreign and U.S. corporate bonds, equity securities, and commercial paper. Corporate bonds and commercial paper are classified within Level 2 of the fair value hierarchy because the fair value is based on observable market data. Equity securities are classified within Level 1 because fair value is based on quoted market prices in active markets for identical assets. The Company held equity securities with a fair value of $0.3 million and $0.6 million at December 31, 2018 and December 31, 2017, respectively. Net income for the year ended December 31, 2018 includes $0.3 million of losses on these securities.

Other Fair Value Disclosures

The carrying amounts of cash and cash equivalents, accounts receivable, and accounts payable and accrued expenses approximate their fair values because of the relatively short-term maturities of these financial instruments. The fair value of the interest rate swap is measured using Level 2 inputs.

At December 31, 2018, the Company holds $23.1 million of equity securities consisting of non-controlling investments in privately held companies. These investments, over which the Company does not have the ability to exercise significant influence, are without readily determinable fair values. The investments are measured at cost, less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may have an effect on the fair value of the investment. The carrying value of the strategic investments was $23.1 million and $20.1 million at December 31, 2018 and December 31, 2017, respectively. As of December 31, 2018 no impairments or price adjustments were recorded on the investments. Strategic investments are included with other assets on the consolidated balance sheets.

The fair value of long-term debt is estimated using Level 2 inputs. At December 31, 2018, the fair value of long-term debt, including the current portion, was $91.6 million and its book value was $91.0 million. At December 31, 2017, the fair value of long-term debt, including the current portion, was $159.2 million and its book value was $155.8 million.

Net Income Per Share

Basic net income per share is computed by dividing net income attributable to the Company's stockholders by the weighted-average number of common shares outstanding during the period and does not include any other potentially dilutive securities. Diluted net income per share gives effect to all potentially dilutive securities using the treasury stock method.

The reconciliation from basic to diluted weighted average shares of Common Stock outstanding is as follows (in thousands):

	Year ended December 31,		
	2018	**2017**	**2015**
Basic weighted-average shares of common stock outstanding	15,988	16,138	16,131
Stock options	54	72	96
Diluted weighted-average shares of common stock outstanding	16,042	16,210	16,227

The following notes the number of potential shares of common stock not included in the above calculation because the effects of such were anti-dilutive (in thousands of shares):

	For the Year Ended December 31,		
	2018	**2017**	**2016**
Stock options	5	7	5
Total	5	7	5

Stock-Based Compensation

The Company applies the fair value recognition provisions of the authoritative guidance for the accounting for stock-based compensation and is expensing the fair value of the grants of options to purchase common stock over their vesting period of four years. Relating to grants of options, the Company recognized $0.1 million, $0.1 million and $0.1 million of non-cash, share-based compensation expense during 2018, 2017, and 2016, respectively. See Note 11 for assumptions used to calculate the fair value of the options granted.

The Company also issued 111,474 restricted shares of common stock in 2018; 95,095 restricted shares of common stock in 2017 and 100,005 restricted shares of common stock in 2016. These shares are being charged to income based upon their fair values over their vesting period of four years. The Company accounts for forfeitures as they occur. Non-cash equity-based compensation expense, related to the vesting of restricted shares issued was $6.1 million, $6.6 million and $6.2 million in 2018, 2017, and 2016, respectively.

In connection with certain acquisitions, the Company issued shares of the acquired company to its local management and recorded $0.2 million, $0.3 million, and $0.1 million of stock based compensation during 2018, 2017 and 2016, respectively.

Stock-based compensation expense is recognized within general and administrative expenses within the consolidated income statements.

Business Combinations

The Company accounts for business combinations using the acquisition method of accounting, under which the purchase price of the acquisition is allocated to the assets acquired and liabilities assumed using the fair values determined by management as of the acquisition date. Contingent consideration obligations that are elements of the consideration transferred are recognized as of the acquisition date as part of the fair value transferred in exchange for the

acquired business. Acquisition-related costs incurred in connection with a business combination are expensed as incurred.

Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers" ("ASU 2014-09"), and subsequently issued related updates, (collectively known as ASC 606), which provides a single, comprehensive revenue recognition model for all contracts with customers. The revenue standard is based on the principle that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Company adopted this standard on January 1, 2018. Refer to Note 3 to the Consolidated Financial Statements in this Report.

In April 2015, the FASB issued ASU 2015-05, "Customer's Accounting for Fees Paid in a Cloud Computing Arrangement", which provides guidance about whether a cloud computing arrangement includes software and how to account for the license for software. The new guidance does not change the accounting for a customer's accounting for service contracts. The adoption of ASU 2015-05 by the Company on January 1, 2017 did not have a material impact on the Company's financial position, result of operations or cash flows.

In January 2016, the FASB issued ASU 2016-01, "Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities" ("ASU 2016-01"), which addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. The Company adopted this standard on January 1, 2018. Upon adoption the Company held $20.1 million of equity investments that did not have readily determinable fair values. As a result these investments are measured at cost less impairments, adjusted for observable price changes of similar investments of the same issuer. The Company has not adjusted the cost of these investments since acquisition. Upon adoption, the Company held $0.6 million of equity investments with readily determinable fair values and reclassified $0.2 million of unrealized gains on this investment to retained earnings.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)" and subsequently issued related updates ("ASU 2016-02"), which provide comprehensive lease accounting guidance. The standard requires entities to recognize lease assets and liabilities on the balance sheet as well as disclosure of key information about leasing arrangements. ASU 2016-02 will become effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, with early adoption permitted. The Company has implemented new systems, processes and controls to implement the guidance. The Company will adopt the standard on January 1, 2019 by applying the new lease requirements at the effective date and will recognize a cumulative-effect adjustment to the opening balance sheet retained earnings in the period of adoption with no adjustments to prior periods. The Company expects to adopt the package of practical expedients which allows it to not reassess: i) whether an arrangement contains a lease, ii) operating and capital lease classifications; and iii) previously recorded initial direct costs. The adoption will result in right to use assets and liabilities being recorded on the Company's balance sheet. The Company is finalizing quantitative information related to the impact of the guidance including the incremental borrowing rates for classes of leases. The right of use asset and liability balances recorded will be material to the Company's financial statements.

In March 2016, the FASB issued ASU 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting". The standard is intended to simplify several areas of accounting for share-based compensation arrangements, including the income tax impact, classification on the statement of cash flows and forfeitures. The Company adopted ASU 2016-09 on January 1, 2017. The guidance requires the recognition of the income tax effects of awards in the income statement when the awards vest or are settled, thus eliminating additional paid-in capital pools. This had no impact on the Company's historical results. Also as a result of the adoption, the Company changed its policy election to account for forfeitures as they occur rather than on an estimated basis. The change resulted in the Company reclassifying $0.3 million from additional paid-in capital to retained earnings for the net cumulative-effect adjustment in stock compensation expense related to prior periods.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"), which provides further clarification on eight cash flow

classification issues. The Company adopted this standard on January 1, 2018. In November 2016, the FASB issued ASU 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash," ("ASU 2016-18"). The amendments in ASU 2016-18 are intended to reduce diversity in practice related to the classification and presentation of changes in restricted cash or restricted cash equivalents on the statement of cash flows. The amendments in ASU 2016-18 require that amounts generally described as restricted cash and restricted cash equivalents be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The Company adopted this standard on January 1, 2018.

The Company's statement of cash flows reports the cash effects during a period of an entity's operations, its investing transactions, and its financing transactions. The statement of cash flows explains the change during the period in the total cash which includes cash equivalents as well as restricted cash. The Company applies the predominance principle to classify separately identifiable cash flows based on the nature of the underlying cash flows. Debt prepayment or extinguishment costs are classified as cash outflows from financing activities. Contingent consideration payments made three months or less after a business combination are classified as investing activities and those made after that time are classified as financing activities. Proceeds from the settlement of insurance claims are classified on the basis of the nature of the loss. Prior to January 1, 2018, the Company classified all payments made in a business combination as investing activities and did not include restricted cash in total cash. The adoption of ASU 2016-15 and ASU 2016-18 impacted the Company's cash flows for the years ended December 31, 2017 and December 31, 2016 as indicated below (amounts in thousands):

Statement of Cash flows

	Year ended December 31, 2017			Year ended December 31, 2016		
	Reported	Change	Under previous guidance	Reported	Change	Under previous guidance
Net cash provided by operating activities	$ 145,725	$ —	$ 145,725	$ 111,656	$ —	$ 111,656
Net cash used in investing activities	(172,318)	5,525	(166,793)	(296,580)	(12,108)	(308,688)
Net cash used in financing activities	(42,101)	1,178	(40,923)	75,334	—	75,334
Effect of foreign currency exchange rates on total cash	226	—	226	(626)	—	(626)
Net change in total cash	$ (68,468)	$ 6,703	$ (61,765)	$ (110,216)	$ (12,108)	$ (122,324)
Total cash, beginning of period	288,358	(18,637)	269,721	398,574	(6,529)	392,045
Total cash, end of period	$ 219,890	$ (11,934)	$ 207,956	$ 288,358	$ (18,637)	$ 269,721

In October 2016 the FASB issued ASU 2016-16, "Accounting for Income Taxes: Intra-Entity Asset Transfers of Assets Other than Inventory". The new standard eliminates all intra-entity sales of assets other than inventory, the exception under current standards that permits the tax effects of intra-entity asset transfers to be deferred until the transferred asset is sold to a third party or otherwise recovered through use. As a result, a reporting entity would recognize the tax expense from the sale of the asset in the seller's tax jurisdiction when the transfer occurs. Any deferred tax asset that arises in the buyer's jurisdiction would also be recognized at the time of the transfer. The new standard was effective for the Company on January 1, 2018. There was not a material impact to the Company's Consolidated Financial Statements upon adoption.

In January 2017, the FASB issued Accounting Standards Update 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business," or ASU 2017-01. The amendments in ASU 2017-01 provide a screen to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. Under ASU 2017-01, an entity first determines whether substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets. If this threshold is met, the set is not a business and the entity then evaluates whether the set meets the requirement that a business include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. ASU 2017-01 also narrows the definition of outputs by more closely aligning it with how outputs are described in ASC 606. ASU 2017-01 is effective for annual reporting periods, including interim periods within those periods, beginning after December 15, 2017, with early adoption permitted. The Company prospectively adopted ASU 2017-01 in the fourth quarter of 2016. The Company expects that the standard will result in accounting for more transactions as asset acquisitions as opposed to business combination.

In January 2017, the FASB issued Accounting Standards Update 2017-04, "Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment," or ASU 2017-04. The amendments in ASU 2017-04 simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under Step 2, an entity had to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities. Instead, under the amendments in ASU 2017-04, an entity performs its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognizes an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, but not more than the total amount of goodwill allocated to the reporting unit. ASU 2017-04 is effective for annual reporting periods, including interim periods within those periods, beginning after December 15, 2019, with early adoption permitted. The Company adopted this standard in the third quarter of 2017.

In March 2017, the FASB issued ASU 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost". The new guidance requires the service cost component to be presented separately from the other components of net benefit costs. Service cost will be presented with other employee compensation cost within income from operations. The other components of net benefit cost, such as interest cost, expected return on plan assets, amortization of prior service cost and gains or losses are required to be presented in other income. The Company adopted this standard on January 1, 2018.

Prior to January 1, 2018, all components of pension expense were recognized in operating income. The adoption of the standard impacted the Company's Statement of Operations for year ending December 31, 2017 by increasing operating expenses $0.2 million and increasing other income by the same amount. For the year ending December 31, 2016 the adoption decreased operating expenses by $1.4 million and decreased other income by the same amount. There was no impact on income before income taxes. The Company elected the practical expedient allowing the use of the amounts disclosed for the various components of net benefit cost in the pension and other postretirement benefit plans footnote as the basis for the retrospective application.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815) – Targeted Improvements to Accounting for Hedging Activities" ("ASU 2017-12"). The standard: (a) expands and refines hedge accounting for both financial and non-financial risk components, (b) aligns the recognition and presentation of the effects of hedging instruments and hedge items in the financial statements, and (c) includes certain targeted improvements to ease the application of current guidance related to the assessment of hedge effectiveness. The guidance is effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company adopted ASU 2017-12 on January 1, 2019. There was not a material impact to the Company's Consolidated Financial Statements upon adoption.

In February 2018, the FASB issued ASU 2018-02 "Income Statement – Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." ("ASU 2018-02"). The standard gives entities the option to reclassify to retained earnings tax effects related to items in accumulated other comprehensive income that were impacted by the 2017 Tax Cuts and Jobs Act. The guidance is effective for all entities for fiscal years beginning after December 31, 2018 and interim periods within those fiscal years. Early adoption is permitted. The guidance may be applied in the period of adoption or retrospectively to each impacted period. The Company has elected to early adopt ASU 2018-02 on its consolidated financial Statements and apply it to the period of adoption. The impact of the adoption results in a $0.8 million reclassification from accumulated other comprehensive income to retained earnings, which is offset by an equivalent valuation allowance, the net impact is zero.

In August 2018, the FASB issued ASU No. 2018-15, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract ("ASU 2018-15"). This standard requires entities that are customers in cloud computing arrangements to defer implementation costs if they would be capitalized by the entity in software licensing arrangements under the internal-use software guidance. The guidance may be applied retrospectively or prospectively to implementation costs incurred after the date of adoption. ASU 2018-15 is effective for annual and interim reporting periods beginning after December 15, 2019, with early adoption permitted. The Company prospectively adopted this standard in the fourth quarter of 2018. At December 31, 2018, the Company capitalized $0.6 million of implementation costs and none of that amount was amortized during the quarter.

3. REVENUE RECOGNITION

The Company adopted ASC 606 on January 1, 2018. The adoption of ASC 606 impacted the accounting for contract acquisition costs, multiyear retail wireless contracts with promotional discounts, and deferral of certain activation fees as further described below. As a result of the adoption, the company established contract asset and liability balances and began capitalizing and subsequently amortizing contract acquisition costs.

Contract Assets and Liabilities

The Company recognizes contract assets and liabilities on its balance sheet. Contract assets represent unbilled amounts typically resulting from retail wireless contracts with both a multiyear service period and a promotional discount. In these contracts the revenue recognized exceeds the amount billed to the customer. The current portion of the contract asset is recorded in prepayments and other current assets and the noncurrent portion is included in other assets on the Company's balance sheet. Contract liabilities consist of advance payments and billings in excess of revenue recognized. Retail revenue for postpaid customers is generally billed one month in advance and recognized over the period that the corresponding service is rendered to customers. To the extent the service is not provided by the reporting date the amount is recognized as a contract liability. Prepaid service, including mobile voice and data services, sold to customers is recorded as deferred revenue prior to the commencement of services. Contract liabilities are recorded in advanced payments and deposits on its balance sheets. Contract assets and liabilities consisted of the following (amounts in thousands):

	December 31, 2018	January 1, 2018	$ Change	% Change
Contract asset – current	$ 1,900	$ 1,176	$ 724	62%
Contract asset – noncurrent	802	453	349	77%
Contract liabilities	(13,787)	(9,912)	(3,875)	39%
Net contract liability	$ (11,085)	$ (8,283)	$ (2,802)	34%

The contract asset-current is included in prepayments and other current assets, the contract asset – noncurrent is included in other assets, and the contract liabilities are included in advance payments and deposits on the Company's balance sheet. The increase in the Company's net contract liability was due to the timing of customer prepayments and contract billings. During the year ended December 31, 2018, the Company recognized revenue of $8.0 million related to its January 1, 2018 contract liability and amortized $1.8 million of the January 1, 2018 contract asset into revenue. The Company did not recognize any revenue in the year ended December 31, 2018 related to performance obligations that were satisfied or partially satisfied in previous periods.

Contract Acquisition Costs

The December 31, 2018 balance sheet includes current contract acquisition costs of $1.4 million in prepayments and other current assets and long term contract acquisition costs of $1.0 million in other assets. During the year ended December 31, 2018 the Company amortized $1.6 million of contract acquisition cost.

Remaining Performance Obligations

Remaining performance obligations represent the transaction price allocated to unsatisfied performance obligations of certain multiyear retail wireless contracts that include a promotional discount. The transaction price allocated to unsatisfied performance obligations was $12.1 million at December 31, 2018. The Company expects to satisfy the remaining performance obligations and recognize the transaction price within 24 months. The Company has certain retail, wholesale, and renewable energy contracts where transaction price is allocated to remaining performance obligations. However, the Company omits these contracts from the disclosure by applying the right to invoice, one year or less, and wholly unsatisfied performance obligation practical expedients.

Disaggregation

The Company's revenue is presented on a disaggregated basis in Note 16 based on an evaluation of disclosures outside the financial statements, information regularly reviewed by the chief operating decision maker for evaluating the financial performance of operating segments and other information that is used for performance evaluation and resource allocations. This includes revenue from wireline, wireless and renewable energy, as well as domestic versus international wireline and wireless services. This disaggregation of revenue depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

Impacts of adoption in the current period

The Company adopted ASC 606 on January 1, 2018 using the modified retrospective method. The Company elected the practical expedient to apply the new guidance only to contracts that were not substantially complete at the adoption date. The cumulative effect of adopting ASC 606 resulted in a contract asset of $1.6 million of which $1.2 million was recorded in prepayments and other current assets and $0.4 million was recorded in other assets, a contract liability of $0.2 million recorded in advance payments and deposits, contract acquisition costs of $1.5 million of which $0.9 million was recorded in prepayments and other current assets and $0.6 million was recorded in other assets, and a deferred tax liability of $0.3 million with the offset of $1.5 million recorded to retained earnings and $1.1 million recorded to minority interest. The tables below identify changes to the Company’s financial statements as of December 31, 2018 and for the year then ended as a result of the adoption of ASC 606 as compared to previous revenue guidance (amounts in thousands):

Balance Sheet - December 31, 2018

	Reported	Change	Under previous guidance
Prepayments and other current assets	$ 37,855	$ (3,319)	$ 34,536
Total current assets	275,765	(3,319)	272,446
Other assets	37,708	(1,785)	35,923
Total assets	1,107,304	(5,104)	1,102,200
Advance payments and deposits	20,574	(337)	20,237
Accrued taxes	31,795	(131)	31,664
Total current liabilities	140,650	(468)	140,182
Deferred income taxes	10,276	(302)	9,974
Total liabilities	283,980	(770)	283,210
Retained earnings	563,593	(2,481)	561,112
Minority interest	127,937	(1,853)	126,084
Total equity	823,324	(4,334)	818,990
Total liabilities and equity	$ 1,107,304	$ (5,104)	$ 1,102,200

Statement of Operations			
	Year ended December 31, 2018		
	Reported	Change	Under previous guidance
Wireless revenue	$ 198,824	$ (1,075)	$ 197,749
Total revenue	451,207	(1,075)	450,132
Sales, marketing and customer service	35,207	755	35,962
Total operating expenses	390,184	755	390,939
Income from operations	61,023	(1,830)	59,193
Income before taxes	53,742	(1,830)	51,912
Income tax provision	18,870	(131)	18,739
Net income	34,872	(1,699)	33,173
Net income attributable to non-controlling interests	(15,057)	706	(14,351)
Net income attributable to ATN International, Inc. stockholders	$ 19,815	$ (993)	$ 18,822

Statement of Comprehensive Loss			
	Year ended December 31, 2018		
	Reported	Change	Under previous guidance
Net income	$ 34,872	$ (1,699)	$ 33,173
Other comprehensive loss, net of tax	(5,152)	—	(5,152)
Comprehensive loss	29,720	(1,699)	28,021
Less: Comprehensive income attributable to non-controlling interests	(15,057)	706	(14,351)
Comprehensive income (loss) attributable to ATN International, Inc.	$ 14,663	$ (993)	$ 13,670

Statement of Cash Flows - Year ended December 31, 2018

	Reported	Change (1)	Under previous guidance
Net income	$ 34,872	$ (1,699)	$ 33,173
Materials and supplies, prepayments and other current assets	$ 5,924	$ 1,243	$ 7,167
Accrued taxes	29,089	(131)	28,958
Accounts payable and accrued liabilities, advance payments and deposits and other current liabilities	(7,044)	(107)	(7,151)
Other assets	$ (238)	$ 694	$ 456

(1) The adoption of ASC 606 had no impact on operating cash flows, investing cash flows, financing cash flows or net change in total cash.

4. IMPACT OF HURRICANES IRMA AND MARIA

During September 2017, the economy, the Company's customer base and its operations in the U.S. Virgin Islands were severely impacted by the Hurricanes Irma and Maria. The Company's wireless and wireline networks as well as its commercial operations were severely damaged by these storms. As a result of the significant damage to the wireline network and the lack of consistent commercial power in the territory, the Company was unable to provide most of its wireline services, which comprise the majority of revenue in this business, subsequent to the Hurricanes and through a majority of 2018.

During the year ended December 31, 2017, the Company recorded a net pre-tax loss within the Company's consolidated statement of operations of $4.0 million related to the impact of the Hurricanes. This loss consisted of $35.4 million for the write off of damaged assets, net of insurance recoveries of $34.6 million which were received in February 2018. This loss also included $3.2 million of additional operating expenses that were specifically incurred to address the impact of the Hurricanes.

During the year ended December 31, 2018, the Company received $15.5 million in additional funding from the Federal Communications Commission's ("FCC") Universal Service Fund ("USF") to further subsidize its operations in the U.S. Virgin Islands that was recorded as revenue. This level of additional funding is not expected to continue in future periods.

During the years ended December 31, 2017 and 2018, the Company spent $8.6 million and $80.2 million, respectively, for network restoration and resiliency enhancements which allowed the reconnection of a significant majority of affected households and businesses. The Company believes that the wireline network restoration work is substantially complete, however, returning the Company's revenue to pre-Hurricane levels may take significant time as a result of population movements, the economic impact the Hurricanes had on the market, and the Company's subscriber base's appetite for continued wireline services.

5. ACQUISITIONS AND DISPOSITIONS

International Telecom

Acquisitions

One Communications (formerly KeyTech Limited)

On May 3, 2016, the Company completed its acquisition of a controlling interest in One Communications Ltd. (formerly known as KeyTech Limited, "One Communications"), a publicly held Bermuda company listed on the Bermuda Stock Exchange ("BSX") that provides broadband and video services and other telecommunications services to residential and enterprise customers in Bermuda and the Cayman Islands (the "One Communications Acquisition"). Subsequent to the completion of the Company's acquisition, One Communications changed its legal name from KeyTech Limited and changed its "CellOne" and "Logic" trade names in Bermuda to "One Communications". Prior to the Company's acquisition, One Communications also owned a minority interest of approximately 43% in the Company's previously held and consolidated subsidiary, Bermuda Digital Communications Ltd. ("BDC"), that provides wireless services in Bermuda. As part of the transaction, the Company contributed its ownership interest of approximately 43% in BDC and approximately $42 million in cash in exchange for a 51% ownership interest in One Communications. As part of the transaction, BDC was merged with and into a company within the One Communications group. The approximate 15% interest in BDC held in the aggregate by BDC's minority shareholders was converted into the right to receive common shares in One Communications. Following the transaction, BDC became wholly-owned by One Communications, and One Communications continues to be listed on the BSX. A portion of the cash proceeds that One Communications received upon closing was used to fund a one-time special dividend to One Communications' existing shareholders and to retire One Communications' subordinated debt. On May 3, 2016, the Company began consolidating the results of One Communications within its financial statements in its International Telecom segment.

The One Communications Acquisition was accounted for as a business combination of a controlling interest in One Communications in accordance with ASC 805, *Business Combinations*, and the acquisition of an incremental ownership interest in BDC in accordance with ASC 810, *Consolidation*. The total purchase consideration of $41.6

million of cash was allocated to the assets acquired and liabilities assumed at their estimated fair values as of the date of the acquisition.

Consideration Transferred		
Cash consideration - One Communications	$	34,518
Cash consideration - BDC		7,045
Total consideration transferred		41,563
Non-controlling interests - One Communications		32,909
Total value to allocate	$	74,472
Value to allocate - One Communications	$	67,427
Value to allocate - BDC		7,045
Purchase price allocation One Communications:		
Cash		8,185
Accounts receivable		6,451
Other current assets		3,241
Property, plant and equipment		100,892
Identifiable intangible assets		10,590
Other long term assets		3,464
Accounts payable and accrued liabilities		(16,051)
Advance payments and deposits		(6,683)
Current debt		(6,429)
Long term debt		(28,929)
Net assets acquired		74,731
Gain on One Communications bargain purchase	$	7,304
Purchase price allocation BDC:		
Carrying value of BDC non-controlling interest acquired		2,940
Excess of purchase price paid over carrying value of non-controlling interest acquired	$	4,105

The acquired property, plant and equipment is comprised of telecommunication equipment located in Bermuda and the Cayman Islands. The property, plant and equipment was valued using the income and cost approaches. Cash flows were discounted at an approximate 15% rate to determine fair value under the income approach. The property, plant and equipment have useful lives ranging from 3 to 18 years and the customer relationships acquired have useful lives ranging from 9 to 12 years. The fair value of the non-controlling interest was determined using the income approach and a discount rate of approximately 15%. The acquired receivables consist of trade receivables incurred in the ordinary course of business. The Company has subsequently collected the full amount of the receivables.

The purchase price and resulting bargain purchase gain are the result of the market conditions and competitive environment in which One Communications operates along with the Company's strategic position and resources in those same markets. Each of the Company and One Communications realized that their combined resources could better serve customers in Bermuda. The bargain purchase gain is included in operating income for the year ended December 31, 2016.

The Company’s income statement for the year ended December 31, 2016 includes $55.5 million of revenue and $2.8 million of income before taxes attributable to the One Communications Acquisition. The Company incurred $4.3 million of transaction related charges pertaining to legal, accounting and consulting services associated with the

transaction, of which $3.4 million was incurred during the year ended December 31, 2016 and $0.9 million was incurred during the year ended December 31, 2015.

Viya (formerly Innovative) Transaction

On July 1, 2016, the Company completed its acquisition of all of the membership interests of Caribbean Asset Holdings LLC ("CAH"), the holding company for the group of companies operating video services, Internet, wireless and landline services in the U.S. Virgin Islands, British Virgin Islands and St. Maarten (collectively, "Viya"), from the *National Rural Utilities Cooperative Finance Corporation* ("CFC"). In April 2017, the U.S. Virgin Islands operations and the Company's existing wireless operations rebranded their tradenames from "Innovative" and "Choice", respectively, to "Viya." The Company acquired the Viya operations for a contractual purchase price of $145.0 million, reduced by purchase price adjustments of $5.3 million (the "Viya Transaction"). In connection with the transaction, the Company financed $60.0 million of the purchase price with a loan from an affiliate of CFC, the Rural Telephone Finance Cooperative ("RTFC") on the terms and conditions of a Loan Agreement by and among RTFC, CAH and ATN VI Holdings, LLC, the parent entity of CAH and a wholly-owned subsidiary of the Company. The Company funded the remaining purchase price with (i) $51.9 million in cash paid to CFC, (ii) $22.5 million in additional cash paid directly to fund Viya' s pension in the fourth quarter of 2016, and (iii) $5.3 million to satisfy Viya' s other postretirement benefit plan liability. On July 1, 2016, the Company began consolidating the results of Viya within its financial statements in its International Telecom segment. Subsequent to the Viya Transaction, the Company sold the acquired businesses in St. Maarten and the British Virgin Islands, as further described in "Dispositions" below.

The Viya Transaction was accounted as a business combination in accordance with ASC 805. The consideration transferred to CFC of $111.9 million, and used for the purchase price allocation, differed from the contractual purchase price of $145.0 million due to certain GAAP purchase price adjustments including a reduction of $5.3 million related to working capital adjustments and the Company assuming pension and other postretirement benefit liabilities of $27.8 million as discussed above. The Company transferred $51.9 million in cash and $60.0 million in loan proceeds to CFC for total consideration of $111.9 million that was allocated to the assets acquired and liabilities assumed at their estimated fair values as of the date of the acquisition. The table below represents the allocation of the consideration transferred to the net assets of Viya based on their acquisition date fair values:

Consideration Transferred	$ 111,860
Non-controlling interests	221
Total value to allocate	112,081
Purchase price allocation:	
Cash	4,229
Accounts receivable	6,553
Materials & supplies	6,533
Other current assets	1,927
Property, plant and equipment	108,284
Telecommunication licenses	7,623
Goodwill	20,586
Intangible assets	7,800
Other assets	4,394
Accounts payable and accrued liabilities	(15,971)
Advance payments and deposits	(7,793)
Deferred tax liability	(2,935)
Pension and other postretirement benefit liabilities	(29,149)
Net assets acquired	$ 112,081

The acquired property, plant and equipment is comprised of telecommunication equipment located in the U.S Virgin Islands, British Virgin Islands and St. Maarten (subsequently disposed, see below). The property, plant and

equipment was valued using the income and cost approaches. Cash flows were discounted between 14% and 25% based on the risk associated with the cash flows to determine fair value under the income approach. The property, plant and equipment have useful lives ranging from 1 to 18 years and the customer relationships acquired have useful lives ranging from 7 to 13 years. The fair value of the non-controlling interest was determined using the income approach with discount rates ranging from 15% to 25%. The acquired receivables consist of trade receivables incurred in the ordinary course of business. The Company has collected full amount of the receivables. The Company recorded a liability equal to the funded status of the plans in its purchase price allocation. Discount rates between 3.6% and 3.9% were used to determine the pension and postretirement benefit obligations.

The goodwill generated from the Viya Transaction is primarily related to value placed on the acquired employee workforces, service offerings, and capabilities of the acquired businesses as well as expected synergies from future combined operations. The goodwill is not deductible for income tax purposes.

The Company's income statement for the year ended December 31, 2016 includes $53.0 million of revenue and $1.5 million of income before taxes attributable to the Viya Acquisition. The Company incurred $4.1 million of transaction related charges pertaining to legal, accounting and consulting services associated with the transaction, of which $2.2 million was incurred during the year ended December 31, 2016 and $1.9 million was incurred during the year ended December 31, 2015.

Disposition

On August 18, 2017, the Company completed the sale of the Viya cable operations located in the British Virgin Islands. The company did not recognize a gain or loss on the transaction.

On January 3, 2017, the Company completed the sale of the Viya cable operations located in St. Maarten for $4.8 million and recognized a gain of $0.1 million on the transaction.

On December 15, 2016, the Company transferred control of its subsidiary in Aruba to another stockholder in a nonreciprocal transfer. Subsequent to that date, it no longer consolidated the results of the operations of the Aruba business. The Company did not recognize a gain or loss on the transaction.

The results of the British Virgin Islands, St. Maarten, and Aruba operations are not material to the Company's historical results of operations. Since the dispositions do not relate to a strategic shift in its operations, the historical results and financial position of the operations are presented within continuing operations.

U.S. Telecom

Acquisition

In July 2016, the Company acquired certain telecommunications fixed assets and the associated operations located in the western United States. The acquisition qualified as a business combination for accounting purposes. The Company transferred $9.1 million of cash consideration in the acquisition. The consideration transferred was allocated to $10.2 million of acquired fixed assets, $3.5 million of deferred tax liabilities, and $0.7 million to other net liabilities, and the resulting $3.1 million in goodwill which is not deductible for income tax purposes. Results of operations for the business are included in the U.S. Telecom segment and are not material to the Company's historical results of operations.

Disposition

On March 8, 2017, the Company completed the sale of its integrated voice and data communications and wholesale transport businesses in New England and New York for consideration of $25.9 million (the "Sovernet Transaction"). The consideration included $2.0 million of contingent consideration which represented the fair value of payments related to certain operational milestones of the disposed assets. The value of the contingent consideration was

up to $4.0 million based on whether or not the operational milestones are achieved by December 31, 2017. The table below identifies the assets and liabilities transferred (amounts in thousands):

Consideration Received	$ 25,926
Assets and liabilities disposed	
Cash	1,821
Accounts receivable	1,696
Inventory	639
Prepayments and other current assets	1,034
Property, plant and equipment	25,294
Other assets	288
Accounts payable and accrued liabilities	(1,718)
Advance payments and deposits	(1,897)
Net assets disposed	27,157
Consideration less net assets disposed	(1,231)
Transaction costs	(1,156)
Loss	$ (2,387)

Prior to the closing of the transaction, the Company repurchased non-controlling interests from minority shareholders in a Sovernet subsidiary for $0.7 million. The non-controlling interest had a book value of zero. Additionally, the Company recorded a loss on deconsolidation of $0.5 million.

The Company incurred $1.2 million of transaction related charges pertaining to legal, accounting and consulting services associated with the transaction, of which $0.6 million were incurred during the year ended December 31, 2017 and $0.6 million were incurred during the year ended December 31, 2016. Since the Sovernet disposition does not relate to a strategic shift in its operations, the historic results and financial position of the operations are presented within continuing operations.

Subsequent to close of the Sovernet Transaction, management continually monitored and assessed the probability of earning the contingent consideration. In September 2017, based on progress toward achieving the operational milestones, and the December 31, 2017 deadline under which to do so, management determined that earning the contingent consideration was unlikely. As a result, the fair value of the contingent consideration was reduced to zero. The amount was recorded as a loss on disposition of assets within operating income during the year ended December 31, 2017. The disposed assets did not achieve the operational milestones by the December 31 deadline.

Prior to the Sovernet Transaction, in the second quarter of 2016, the Company recorded an impairment loss of $11.1 million on assets related to Sovernet. The impairment consisted of a $3.6 million impairment of property, plant and equipment and $7.5 million impairment of goodwill.

Renewable Energy

Acquisition

On April 7, 2016, the Company completed its acquisition of a solar power development portfolio in India (the "Vibrant Energy Acquisition"). The business operates under the name Vibrant Energy. The projects to be developed initially are located in the states of Andhra Pradesh and Telangana and are based on a commercial and industrial business model, similar to the Company's existing renewable energy operations in the United States. As of April 7, 2016, the

Company began consolidating the results of Vibrant Energy in its financial statements within its Renewable Energy segment.

The Vibrant Energy Acquisition was accounted for as a business combination in accordance with ASC 805. The total purchase consideration of $6.2 million was allocated to the assets acquired and liabilities assumed at their estimated fair values as of the date of the acquisition. The table below represents the allocation of the consideration transferred to the net assets of Vibrant Energy based on their acquisition date fair values (in thousands):

Consideration Transferred	**$** 6,193
Purchase price allocation:	
Cash	136
Prepayments and other assets	636
Property, plant and equipment	7,321
Goodwill	3,279
Accounts payable and accrued liabilities	(5,179)
Net assets acquired	$ 6,193

The consideration transferred included $3.5 million paid at close of the transaction and $2.7 million of contingent consideration payable subsequent to that time, which was contingent upon the passage of time and achievement of production milestones that were considered probable. As of December 31, 2018, $1.4 million of the contingent consideration was paid, $0.2 million remains payable, and $1.1 million was not paid as the operational milestones were not achieved. The acquired property, plant and equipment is comprised of solar equipment and the accounts payable and accrued liabilities consists mainly of amounts payable for certain asset purchases. The fair value of the property, plant, and equipment was based on recent acquisition costs for the assets, given their recent purchase dates from third parties. The goodwill is not deductible for income tax purposes and primarily relates to the assembled workforce of the business acquired.

The Company incurred $11.4 million of transaction related charges pertaining to legal, accounting and consulting services associated with the transaction, of which $10.1 million was incurred during the year ended December 31, 2016 and $1.3 million was incurred during the year ended December 31, 2015.

Disposition

On November 6, 2018, the Company completed the sale of its U.S. solar business that owns and manages distributed generation solar power projects operated under the Ahana name in Massachusetts, California and New Jersey (the “U.S. Solar Operations”) to CleanCapital Holdco 4, LLC. The transaction has a total value of approximately $122.6 million, which includes a cash purchase price of $65.3 million and the assumption of approximately $57.3 million in debt, and is subject to certain other post-closing adjustments (the “U.S. Solar Transaction”). The Company is finalizing working capital adjustments. Approximately $6.5 million of the purchase price will be held in escrow for a period of

twelve months after the closing to secure the Company's indemnification obligation. The table below identifies the assets and liabilities transferred (amounts in thousands):

Consideration Received	$ 65,286
Assets and liabilities disposed	
Cash	3,049
Accounts receivable	1,248
Prepayments and other current assets	801
Property, plant and equipment	94,678
Restricted cash	8,407
Other assets	38
Current portion of long-term debt	(6,992)
Accounts payable and accrued liabilities	(938)
Accrued taxes	586
Long-term debt, excluding current portion	(48,038)
Net assets disposed	52,839
Consideration less net assets disposed	12,447
Transaction costs	(2,133)
Gain	$ 10,314

The Company allocated $1.1 million of the gain to non-controlling interests within the consolidated income statement. During the year ended December 31, 2018, the Company incurred $2.1 million of transaction related charges pertaining to legal, accounting and consulting services associated with the transaction. The U.S. Solar Operations do not qualify as a discontinued operation because the disposition does not represent a strategic shift that has a major effect on the Company's operations and financial results. As a result, the historical results are included in continuing operations.

Pro forma Results

The following table reflects unaudited pro forma operating results of the Company for the years ended December 31, 2016 and December 31, 2015 as if the One Communications and Viya Transactions occurred on January 1, 2015. Other acquisitions are not included in the pro forma amounts since the results are immaterial. The pro forma amounts adjust One Communications' and Viya's results to reflect the depreciation and amortization that would have been recorded assuming the fair value adjustments to property, plant and equipment and intangible assets had been applied from January 1, 2015. Also, the pro forma results were adjusted to reflect changes to the acquired entities' capital structure related to the transaction. One Communications' results reflect the retirement of $24.7 million of debt. Viya's results reflect the retirement of $185.8 million of debt and the addition of $60 million of purchase price debt. Finally, the Company's results were adjusted to reflect the Company's incremental ownership in BDC.

The pro forma results for the year ended December 31, 2016 include $5.4 million of impairment charges recorded by One Communications and Viya prior to the Company's acquisition of the businesses and were recorded prior to ATN's acquisition of the entities. The pro forma results for the year ended December 31, 2015 include $168.7 million of impairment charges, $85.6 million recorded by One Communications and $83.1 million recorded by Viya. Both the 2016 and 2015 impairment charges were recorded prior to ATN's acquisition of the entities. Amounts are presented in thousands, except per share data.

(unaudited)	Year ended December 31, 2016 As Reported	2016 Pro-Forma	2015 As Reported	2015 Pro-Forma
Revenue	$ 457,003	$ 535,628	$ 355,369	$ 546,589
Net income (loss) attributable to ATN International, Inc. Stockholders	12,101	14,660	16,940	(97,102)
Earnings per share:				
Basic	0.75	0.91	1.06	(6.06)
Diluted	0.75	0.90	1.05	(6.02)

The unaudited pro forma data is presented for illustrative purposes only and is not necessarily indicative of the operating resulted that would have occurred if the acquisitions had been consummated on these dates or of future operating results of the combined company following this transaction.

6. ACCOUNTS RECEIVABLE:

As of December 31, 2018 and 2017, accounts receivable consist of the following (in thousands):

	2018	2017
Retail	$ 13,785	$ 19,530
Wholesale	40,982	39,022
Accounts receivable	54,767	58,552
Less: allowance for doubtful accounts	(16,462)	(15,023)
Total accounts receivable, net	$ 38,305	$ 43,529

7. FIXED ASSETS:

As of December 31, 2018 and 2017, property, plant and equipment consisted of the following (in thousands):

	Useful Life (in Years)	2018	2017
Telecommunications equipment and towers	5 -15	$ 914,276	$ 774,548
Solar assets	20-23	57	113,218
Office and computer equipment	3 -10	77,085	76,706
Buildings	15-39	48,900	48,058
Transportation vehicles	3 -10	15,039	12,221
Leasehold improvements	Shorter of useful life or lease term	2,033	2,864
Land	—	14,728	12,516
Furniture and fixtures	5 -10	9,200	6,674
Total property, plant and equipment		1,081,318	1,046,805
Construction in progress		107,598	123,001
Total property, plant and equipment		1,188,916	1,169,806
Less: Accumulated depreciation		(562,064)	(526,660)
Net fixed assets		$ 626,852	$ 643,146

Depreciation and amortization of fixed assets, using the straight-line method over the assets' estimated useful life, for the years ended December 31, 2018, 2017 and 2016 was $83.0 million, $83.3 million and $73.3 million, respectively. Included within telecommunication equipment and towers are certain right to use assets under capital lease with a cost of $27.7 million and $30.0 million and net book value of and $20.2 million and $24.4 million, as of December 31, 2018 and 2017, respectively. Remaining amounts due under the Indefeasible Rights of Use ("IRUs") are $1.3 million and $0.6 million as of December 31, 2018 and 2017, respectively.

For the years ended December 31, 2017 and 2016, amounts of capital expenditures were offset by grants of $1.5 million and $2.3 million, respectively. There was no such offset for the year ended December 31, 2018.

In 2018, the U.S. Telecom segment sold approximately 100 cell sites for $24.0 million. The disposed assets had a book value of $8.8 million and the Company recorded a gain of $15.2 million on the transaction.

8. GOODWILL AND INTANGIBLE ASSETS

Goodwill

The Company tests goodwill for impairment at each of its reporting units on an annual basis, which has been determined to be as of December 31st of each fiscal year. The Company's reporting units are one level below its operating segments. The Company also tests goodwill between annual tests if an event occurs or circumstances change that indicate that the fair value of a reporting unit may be below its carrying value.

The Company's qualitative goodwill impairment test includes, but is not limited to, assessing macroeconomic conditions, industry and market considerations, technological changes and trends, overall financial performance of the reporting unit. The Company quantitative test for goodwill impairment involves a comparison of the estimated fair value of a reporting unit to its carrying amount, including goodwill. The Company determines the fair value of a reporting unit using a discounted cash flow ("DCF") analysis. Determining fair value requires the exercise of significant judgment, including judgments about appropriate discount rates, perpetual growth rates, and the amount and timing of expected future cash flows. Discount rates are based on a weighted-average cost of capital ("WACC"), which represents the average rate a business must pay its providers of debt and equity. The cash flows employed in the DCF analysis were derived from internal earnings and forecasts and external market forecasts.

During 2018 and 2017, the Company performed qualitative assessments for all of its reporting units except for the 2017 trigger based impairment review in its International Telecom segment discussed below. During 2016, the Company performed a qualitative assessment for one reporting unit in its International Telecom segment and one reporting unit in its Renewable Energy segment and determined there was no impairment. Also in 2016, the company performed a quantitative assessment for one reporting unit in its International Telecom segment and one reporting unit in its US Telecom segment concluding no impairment was present.

The Company's annual impairment assessment of its goodwill for all reporting units as of December 31, 2018 determined that no impairment relating to its goodwill existed during the year ended December 31, 2018.

In the third quarter of 2017, the Company determined that the damage caused by the Hurricanes caused a triggering event requiring it to assess the related reporting unit's goodwill for impairment. After consideration of the disposals of fixed assets within the reporting unit, the impairment test for goodwill was performed by comparing the fair value of the reporting unit to its carrying amount. The Company calculated the fair value of the reporting unit by utilizing an income approach, with Level 3 valuation inputs, including a cash flow discount rate of 14.5%. Determining fair value requires the exercise of significant judgment, including judgments about appropriate discount rates, perpetual growth rates, and the amount and timing of expected future cash flows. The discount rate was based on a weighted-average cost of capital, which represents the average rate the business would pay its providers of debt and equity. The cash flows employed in the discounted cash flow analysis were derived from internal and external forecasts. The impairment assessment concluded that no impairment was required for the goodwill because the fair value of the reporting unit exceeded its carrying amount.

During June 2016, as a result of recent industry consolidation activities and a review of strategic alternatives for the Company's U.S. Wireline business in the Northeast, the Company identified factors indicating the carrying amount of certain assets may not be recoverable. More specifically, the factors included the competitive environment, recent industry consolidation, and the Company's view of future opportunities in the market which began to evolve in the second quarter of 2016. On August 4, 2016, the Company entered into a stock purchase agreement to sell the majority of its U.S. Wireline business. The transaction was completed in March 2017.

As a result of this transaction and market developments, the Company determined it was appropriate to assess the reporting unit's assets for impairment. The reporting unit holds three types of assets for purposes of impairment testing: i) other assets such as accounts receivable and inventory, ii) long lived assets such as property plant and equipment, and iii) goodwill. Management first assessed the other assets for impairment and determined no impairment was appropriate. Second, the property, plant and equipment was assessed for impairment. The impairment test compared the undiscounted cash flows from the use and eventual disposition of the asset group to its carrying amount and determined the carrying amount was not recoverable. The impairment loss of $3.6 million was equal to the amount by which the carrying amount exceeded the fair value. Third management assessed goodwill for impairment and recorded an impairment of $7.5 million. The Company utilized the income approach, with Level 3 valuation inputs, which considered both the purchase agreement and cash flows discounted at a rate of 14% in its fair value calculations. In total, the Company recorded an impairment charge of $11.1 million. The impairment charge is included in income from operations for the year ended December 31, 2016.

The table below disclosed goodwill recorded in each of the Company's segments and accumulated impairment changes (in thousands):

	U.S. Telecom	International Telecom	Renewable Energy	Consolidated
Balance at December 31, 2016	$ 35,268	$ 24,326	$ 3,279	$ 62,873
Acquisitions	—	1,097	—	1,097
Balance at December 31, 2017	35,268	25,423	3,279	63,970
Acquisitions	—	—	—	—
Balance at December 31, 2018	$ 35,268	$ 25,423	$ 3,279	$ 63,970

	U.S. Telecom	International Telecom	Renewable Energy	Consolidated
Balance at December 31, 2017				
Gross	$ 35,268	$ 25,423	$ 3,279	$ 63,970
Accumulated Impairment	—	—	—	—
Net	35,268	25,423	3,279	63,970
Balance at December 31, 2018				
Gross	35,268	25,423	3,279	63,970
Accumulated Impairment	—	—	—	—
Net	$ 35,268	$ 25,423	$ 3,279	$ 63,970

Telecommunications Licenses

The Company tests those telecommunications licenses that are indefinite lived for impairment on an annual basis, which has been determined to be as of December 31 of each fiscal year. The Company also tests telecommunication licenses that are indefinite lived between annual tests if an event occurs or circumstances change that indicate that the fair value of a reporting unit may be below its carrying value.

The Company's qualitative impairment test includes, but is not limited to, assessing macroeconomic conditions, industry and market considerations, technological changes and trends, overall financial performance, and legal and regulatory changes. The Company's quantitative test for impairment involves a comparison of the estimated fair value of an asset to its carrying amount. The Company determines the fair value of a reporting unit using a discounted cash flow analysis with Level 3 valuation inputs.

The Company performed qualitative assessments for its annual impairment assessment of its indefinite lived telecommunications licenses as of December 31, 2018 and determined that there were no indications of potential impairments. The Company performed quantitative and qualitative assessments for its annual impairment assessments of its indefinite lived telecommunications licenses as of December 31, 2017 and 2016 and determined that there no impairments were required.

In the third quarter of 2017, the Company determined that the damage caused by the Hurricanes caused a triggering event requiring us to assess the related reporting unit's indefinite lived telecommunications licenses for impairment. After consideration of the write-downs of fixed assets within the reporting unit, the impairment test for telecommunications licenses was performed by comparing the fair value of the asset to its carrying amount. The Company performed a qualitative and quantitative analysis. The Company calculated the fair value by utilizing an income approach, with Level 3 valuation inputs, including a cash flow discount rate of 14.5%. Determining fair value requires the exercise of significant judgment, including judgments about appropriate discount rates, perpetual growth rates, and the amount and timing of expected future cash flows. The discount rate was based on a weighted-average cost of capital, which represents the average rate the business would pay its providers of debt and equity. The cash flows

employed in the discounted cash flow analysis were derived from internal and external forecasts. The impairment assessment concluded that no impairment was required for the indefinite lived telecommunication licenses because the fair value exceeded its carrying amount.

The changes in the carrying amount of the Company's telecommunications licenses, by operating segment, for the three years ended December 31, 2018 were as follows (in thousands):

	U.S. Telecom	Int'l Telecom	Consolidated
Balance at December 31, 2016	$ 24,944	$ 23,347	$ 48,291
Acquired licenses	47,692	—	47,692
Dispositions	(31)	—	(31)
Balance at December 31, 2017	$ 72,605	$ 23,347	$ 95,952
Acquired licenses	485	—	485
Dispositions	(2,750)	—	(2,750)
Balance at December 31, 2018	$ 70,340	$ 23,347	$ 93,687

The licenses acquired during 2018 and 2017 are expected to be available for use into perpetuity.

Customer Relationships

The customer relationships, all of which are included in the International Telecom segment, are being amortized on an accelerated basis, over the expected period during which their economic benefits are to be realized. The Company recorded $2.4 million, $3.2 million, and $2.0 million of amortization related to customer relationships during year ended December 31, 2018, 2017, and 2016, respectfully.

Future amortization of customer relationships, in its International Telecom segment, is as follows (in thousands):

	Future Amortization
2019	$ 1,897
2020	1,528
2021	1,300
2022	1,143
2023	828
Thereafter	2,627
Total	$ 9,323

Other Intangible Assets

The Company has other intangible assets of $4.5 million consisting of $3.0 million of franchise rights and $1.5 million of tradenames in its International Telecom segment. These assets are recorded in other assets on the Company's balance sheet as of December 31, 2018. In 2016, the Company assessed the value of a tradename and concluded that its book value exceeded its fair value. As a result, the Company recorded a non-cash impairment charge of $0.3 million during the year ended December 31, 2016.

9. LONG-TERM DEBT

The Company has a credit facility with CoBank, ACB and a syndicate of other lenders to provide for a $225 million revolving credit facility (the "Credit Facility") that includes (i) up to $10 million under the Credit Facility for standby or trade letters of credit, (ii) up to $25 million under the Credit Facility for letters of credit that are necessary or desirable to qualify for disbursements from the FCC's mobility fund and (iii) up to $10 million under a Swingline sub-facility. The Credit Facility has a maturity date of December 31, 2019 and the Company currently expects to enter into a new agreement before the maturity date. The Credit Facility also provides for the incurrence by the Company of

incremental term loan facilities, when combined with increases to revolving loan commitments, in an aggregate amount not exceed $200 million (the "Accordion").

Amounts the Company may borrow under the Credit Facility bear interest at a rate equal to, at the Company's option, either (i) the London Interbank Offered Rate (LIBOR) plus an applicable margin ranging between 1.50% to 1.75% or (ii) a base rate plus an applicable margin ranging from 0.50% to 0.75%. Swingline Loans will bear interest at the base rate plus the applicable margin for base rate loans. The base rate is equal to the higher of (i) 1.00% plus the higher of (x) the one-week LIBOR and (y) the one-month LIBOR; (ii) the federal funds effective rate (as defined in the Credit Facility) plus 0.50% per annum; and (iii) the prime rate (as defined in the Credit Facility). The applicable margin is determined based on the ratio (as further defined in the Credit Facility) of the Company's indebtedness to EBITDA. Under the terms of the Credit Facility, the Company must also pay a fee ranging from 0.175% to 0.250% of the average daily unused portion of the Credit Facility over each calendar quarter.

The Credit Facility contains customary representations, warranties and covenants, including a financial covenant that imposes a maximum ratio of indebtedness to EBITDA as well as covenants limiting additional indebtedness, liens, guaranties, mergers and consolidations, substantial asset sales, investments and loans, sale and leasebacks, transactions with affiliates and fundamental changes. The Company's investment in "unrestricted" subsidiaries is limited to $400 Million less the aggregate amount of certain dividend payments to its stockholders. Amounts borrowed under the Accordion are also subject to proforma compliance with a net leverage ratio financial covenant. As of December 31, 2018, the Company in compliance with all of the financial covenants of the Credit Facility.

As of December 31, 2018, the Company had no borrowings under the Credit Facility.

Ahana Debt

On December 24, 2014, in connection with the Ahana Acquisition, the Company assumed $38.9 million in long-term debt (the "Original Ahana Debt"). The Original Ahana Debt included multiple loan agreements with banks that bore interest at rates between 4.5% and 6.0%, matured at various times between 2018 and 2023 and were secured by certain solar facilities. Repayment of the Original Ahana Debt was being made in cash on a monthly basis until maturity.

The Original Ahana Debt also included a loan from Public Service Electric & Gas (the "PSE&G Loan"). The PSE&G Loan bore interest at 11.3%, matured in 2027, and was secured by certain solar facilities. Repayment of the Original Ahana Debt with PSE&G were able to be made in either cash or SRECs, at the Company's discretion, with the value of the SRECs being fixed at the time of the loan's closing. Historically, the Company had made all repayments of the PSE&G Loan using SRECs.

On December 19, 2016, Ahana's wholly owned subsidiary, Ahana Operations, issued $20.6 million in aggregate principal amount of 4.427% senior notes due 2029 (the "Series A Notes") and $45.2 million in aggregate principal amount of 5.327% senior notes due 2031 (the "Series B Notes" and collectively with the Series A Notes and the PSE&G Loan, the "Ahana Debt"). Interest and principal were payable semi-annually, until the respective maturity dates of March 31, 2029 (for the Series A Notes) and December 31, 2031 (for the Series B Notes). Cash flows generated by the solar projects that secured the Series A Notes and Series B Notes were only available for payment of such debt and were not available to pay other obligations or the claims of the creditors of Ahana or its subsidiaries. However, subject to certain restrictions, Ahana Operations held the right to the excess cash flows not needed to pay the Series A Notes and Series B Notes and other obligations arising out of the securitizations. The Series A Notes and Series B Notes were secured by certain assets of Ahana and were guaranteed by certain of its subsidiaries.

A portion of the proceeds from the issuances of the Series A Notes and Series B Notes was used to repay the Original Ahana Debt in full except for the PSE&G Loan which remained outstanding after the refinancing.

The Company capitalized $2.8 million of fees associated with the Series A Notes and Series B Notes which were recorded as a reduction to the debt carrying amount and was being amortized over the life of the notes.

On November 6, 2018, the Company consummated the U.S. Solar Transaction, which included the transfer of the Original Ahana Debt, the Series A Notes and Series B Notes to the purchaser.

One Communications Debt

In connection with the One Communications Acquisition on May 3, 2016, the Company assumed $35.4 million in debt (the "One Communications Debt") in the form of a loan from HSBC Bank Bermuda Limited. The One Communications Debt was scheduled to mature in 2021, was bearing interest at the three-month LIBOR rate plus a margin of 3.25%, and was repaid quarterly. The One Communications Debt contained customary representations, warranties and affirmative and negative covenants (including limitations on additional debt, guaranties, sale of assets and liens) and a financial covenant that limited the maximum ratio of indebtedness less cash to annual operating cash flow.

On May 22, 2017, the Company amended and restated the One Communications Debt to increase the original facility by $8.6 million to $37.5 million. The amended and restated debt is scheduled to mature on May 22, 2022 and bears interest at the three month LIBOR rate plus an applicable margin rate ranging between 2.5% to 2.75% paid quarterly. The amended and restated One Communications Debt contains customary representations, warranties and affirmative and negative covenants (including limitations on additional debt, guaranties, sale of assets and liens) and financial covenants that limit the ratio of tangible net worth to long term debt and total net debt to EBITDA and require a minimum debt service coverage ratio (net cash generated from operating activities plus interest expense less net capital expenditures to debt repayments plus interest expense). The Company was in compliance with its covenants as of December 31, 2018.

As a condition of the amendment of the One Communications Debt, within 90 days of the refinance date the Company was required to enter into a hedging arrangement with a notional amount equal to at least 30% of the outstanding loan balance and a term corresponding to the maturity of the One Communications Debt. In July 2017, the Company entered into an amortizing interest rate swap. This swap has been designated as a cash flow hedge, had an original notional amount of $11.0 million, has an interest rate of 1.874%, and expires in March 2022. As of December 31, 2018, the swap has an unamortized balance of $9.6 million.

In connection with the amendment of the One Communications Debt, the Company increased the limit of its overdraft facility from $5.0 million to $10.0 million. This facility has an interest rate of three month LIBOR plus 1.75%.

The Company capitalized $0.3 million of fees in 2017 associated with the One Communications Debt, which is recorded as a reduction to the debt carrying amount and will be amortized over the life of the debt.

As of December 31, 2018, $31.9 million of the One Communications Debt was outstanding, there were no borrowings under the overdraft facility, and $0.2 million of the capitalized fees remain unamortized.

As of December 31, 2018, One Communications was in compliance with its financial covenants.

Viya Debt *(formerly Innovative Debt)*

On July 1, 2016, the Company and certain of its subsidiaries entered into a $60.0 million loan agreement (the "Viya Debt") with Rural Telephone Finance Cooperative ("RTFC"). The Viya Debt agreement contains customary representations, warranties and affirmative and negative covenants (including limitations on additional debt, guaranties, sale of assets and liens) and a financial covenant that limits the maximum ratio of indebtedness to annual operating cash flow to 3.5 to 1.0 (the "Net Leverage Ratio"). This covenant is tested on an annual basis at the end of each fiscal year. Interest is paid quarterly at a fixed rate of 4.0% and principal repayment is not required until maturity on July 1, 2026. Prepayment of the Viya Debt may be subject to a fee under certain circumstances. The debt is secured by certain assets of the Company's Viya subsidiaries and is guaranteed by the Company. Earlier in 2018, the Company began funding the restoration of Viya's network following the Hurricanes through an intercompany loan arrangement which exceeded certain limitations on Viya incurring additional debt. RTFC consented to these intercompany advances and increased the intercompany debt limit to $50.0 million. Subsequent to the end of the second quarter end, RTFC increased the limit to $75.0 million at the Company's request due to an increase in the on-going restoration and

resiliency costs. The Company was not in compliance with the Net Leverage Ratio covenant for the year ending December 31, 2018 and received a waiver from the RTFC on February 25, 2019

The Company paid a fee of $0.9 million in 2016 to lock the interest rate at 4% per annum over the term of the Viya debt. The fee was recorded as a reduction to the Viya debt carrying amount and will be amortized over the life of the loan.

As of December 31, 2018, $60.0 million of the Viya Debt remained outstanding and $0.7 million of the rate lock fee was unamortized.

10. GOVERNMENT GRANTS

Universal Service Fund

The Federal Universal Service Fund ('USF') is a subsidy program managed by the FCC. USF funds are disbursed to telecommunication providers through four programs: the High Cost Program; Low Income Program; Schools and Libraries Program ("E-Rate"); and Rural Health Care Program. The Company participates in High Cost Program, Low Income Program, Schools and Libraries Programs, and Rural Health Care Support programs as further described below. All of the funding programs are subject to certain operational and reporting compliance requirements. The Company believes it is in compliance will all applicable requirements.

The FCC's Mobility Funds and Connect America Funds are administered through the High Cost Program. The High-Cost Support program subsidizes telecommunications services in rural and remote areas. The FCC created the Phase I Mobility Fund ("Phase I Mobility Fund"), a one-time award meant to support wireless coverage in underserved geographic areas in the United States.

The Company received $21.1 million of Phase I Mobility Fund support to its wholesale wireless business (the "Mobility Funds") to be used to expand voice and broadband networks in certain geographic areas in order to offer either 3G or 4G service. Of these funds, $7.2 million was recorded as an offset to the cost of the property, plant, and equipment associated with these projects and, consequentially, a reduction of future depreciation expense. The remaining $13.9 million received offset operating expenses from inception of the program through part of the third quarter of 2018. The Mobility Funds projects and their operating results are included within the Company's U.S. Telecom segment. As part of the receipt of the Mobility Funds, the Company committed to comply with certain additional FCC construction and other requirements. If the requirements are not met the funds may be subject to claw back provisions. The Company currently expects to comply with all applicable requirements related to these funds.

During the years ended December 31, 2018, 2017 and 2016, the Company recorded $16.5 million, $16.5 million, and $8.2 million, respectively, of revenue from High Cost Support in its International Telecom segment for its U.S. Virgin Islands operations. Also, during each year ended December 31, 2018, 2017 and 2016, the Company recorded $1.2 million of High Cost Support revenue in its US Telecom segment. The Company is subject to certain operational, reporting and construction requirements as a result of this funding and the Company believes that it is in compliance with all of these requirements. In addition, the Company recorded revenue of $15.5 million during the year ended December 31, 2018, from additional funding authorized by the FCC following the Hurricanes.

In August 2018, the Company was awarded $79.9 million over 10 years under the Connect America Fund Phase II Auction. The funding requires the Company to provide fixed broadband and voice services to certain eligible areas in the United States. The Company is subject to operational and reporting requirements under the program. The Company determined the award is a revenue grant and as a result will record the funding as revenue upon receipt. The Company expects to begin receiving funds under the Connect America Fund Phase II program during mid-2019.

The E-Rate program provides discounted telecommunication access to eligible schools and libraries. The E-Rate program awards (i) special construction funding to build network connectivity for eligible participants, and (ii) pays for discounted recurring charges for eligible broadband services. The special construction funding is used to reimburse construction costs and is distributed upon completion of a project. As of December 31, 2018, the Company was awarded

approximately $15.4 million of E-Rate grants with construction completion obligations between June 2019 and June 2020. Once these projects are constructed the Company is obligated to provide service to the E-Rate program participants. The Company is in various stages of constructing the networks and has not received any of the funds. The Company expects to meet all requirements associated with these grants.

The Company also receives funding to provide discounted telecommunication services to eligible customers under the E-Rate, Lifeline, and Rural Health Care Support Programs. During the years ended December 31, 2018, 2017, and 2016 the Company recorded revenue of $8.2 million, $10.2 million, and $11.0 million, respectively, in the aggregate from these programs. The Company is subject to certain operational and reporting requirements under the above mentioned programs and it believes that it is in compliance with all of these requirements.

Tribal Bidding Credit

As part of the broadcast television spectrum incentive auction, the FCC implemented a tribal lands bidding credit to encourage deployment of wireless services utilizing 600 MHz spectrum on the lands of federally recognized tribes. The Company received a bidding credit of $7.4 million under this program in 2018. A portion of these funds will be used to offset network capital costs and a portion will be used to offset the costs of supporting the networks. The Company's current estimate is that it will use $5.4 million to offset capital costs and, consequently, reduce future depreciation expense and $2.0 million to offset the cost of supporting the network which will reduce future operating expense. The credits are subject to certain requirements, including deploying service by January 2021 and meeting minimum coverage metrics. If the requirements are not met the funds may be subject to claw back provisions. The Company currently expects to comply with all applicable requirements related to these funds.

11. EQUITY

Common Stock

The Company has paid quarterly dividends on its common stock since January 1999.

Treasury Stock

In September 2004, the Company's Board of Directors approved a $5.0 million stock buyback plan (the "2004 Repurchase Plan"). Through September 19, 2016, the Company repurchased $4.1 million of its common stock, under the 2004 Repurchase Plan.

On September 19, 2016, the Company's Board of Directors authorized the repurchase of up to $50.0 million of its common stock, from time to time, on the open market or in privately negotiated transactions (the "2016 Repurchase Plan"). The 2016 Repurchase Plan replaces the 2004 Repurchase Plan. As of December 31, 2018, the Company has $37.7 million available to be repurchased under the 2016 Repurchase Plan.

During the years ended December 31, 2018, 2017 and 2016, the Company repurchased the following shares under the 2004 Repurchase Plan and the 2016 Repurchase Plan:

Year ended December 31,	Shares Repurchased	Aggregate Cost (in thousands)	Average Repurchase Price
2018	30,427	$ 1,577	$ 51.82
2017	201,932	10,636	52.67
2016	32,407	2,195	64.72

During the years ended December 31, 2018, 2017 and 2016, the Company repurchased the following shares from employees to satisfy tax withholding and stock options exercise obligations incurred in connection with the vesting of restricted stock awards and the exercise of stock options:

Year ended December 31,	Shares Repurchased	Aggregate Cost (in thousands)	Average Repurchase Price
2018	141,180	$ 10,859	$ 76.76
2017	32,814	2,348	71.54
2016	38,279	2,775	72.50

Stock-Based Compensation

The Company reserved 2,000,000 shares for the grant of stock options, restricted stock awards, restricted stock units, stock equivalents and awards of shares of common stock that are not subject to restrictions or forfeiture. As of December 31, 2018, the Company has approximately 801,000 shares available for grants.

Stock Options

Stock options have a term of ten years and vest annually and ratably over a period of four years.

The following table summarizes stock option activity for the years ended December 31, 2018 and 2017:

	Year Ended December 31, 2018			
	Number of Options	Weighted Avg. Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2018	200,021	$ 41.76		
Granted	—	—		
Exercised	(158,021)	39.95		
Outstanding at December 31, 2018	42,000	48.61	4.1	$ 823,515
Vested and expected to vest at December 31, 2018	42,000	48.61	4.1	$ 962,840
Exercisable at December 31, 2018	33,250	46.76	3.0	$ 823,515

	Year Ended December 31, 2017			
	Number of Options	Weighted Avg. Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2017	225,822	$ 39.77		
Granted	10,000	52.97		
Exercised	(35,801)	32.29		
Outstanding at December 31, 2017	200,021	41.76	3.6	$ 2,780,253
Vested and expected to vest at December 31, 2017	200,021	41.76	3.6	$ 2,780,253
Exercisable at December 31, 2017	187,521	40.77	3.6	$ 2,757,353

The unvested options as of December 31, 2018 represent $0.1 million in unamortized stock-based compensation which will be recognized over a weighted average term of 2.3 years.

The following table summarizes information relating to options granted and exercised during the years ended December 31, 2018, 2017 and 2016 (in thousands, except fair value of options granted data):

	2018	2017	2016
Weighted-average fair value of options granted	$ —	$ 13.77	$ —
Aggregate intrinsic value of options exercised	5,927	936	1,591
Cash proceeds received upon exercise of options	72	1,030	649
Excess tax benefits from share-based compensation	—	—	591

The aggregate intrinsic value represents the total pre-tax intrinsic value (the difference between the Company's closing common stock price on December 31st and the exercise price, multiplied by the number of the in-the-money stock options) that would have been received by the stock option holders had all stock options holders exercised their stock options on December 31st. The amount of aggregate intrinsic value will change based on the fair market value of the Company's common stock.

The estimated fair value of the options granted during the year ended December 31, 2017 was determined using a Black Scholes option pricing model, based on the following weighted average assumptions:

	2017
Risk-free interest rate	1.79 %
Expected dividend yield	1.28 %
Expected life	4.00 years
Expected volatility	34.01 %

The Company did not grant any options during the years ended December 31, 2018 or 2016. The Company recognized $0.1 million, $0.1 million and $0.1 million, respectively, of stock compensation expense relating to the granted options during 2018, 2017, and 2016, respectively.

Restricted Stock

Restricted stock issued under the 2008 Equity Investment Plan vest ratably over four years.

The following table summarizes restricted stock activity during the year ended December 31, 2018:

	Shares	Weighted Avg. Fair Value
Unvested as of January 1, 2018	214,938	$ 68.62
Granted	111,474	59.52
Forfeited	(31,327)	66.53
Vested and issued	(94,432)	66.27
Unvested as of December 31, 2018	200,653	$ 65.21

The following table summarizes restricted stock activity during the year ended December 31, 2017:

	Shares	Weighted Avg. Fair Value
Unvested as of January 1, 2017	229,040	$ 67.13
Granted	95,095	68.09
Forfeited	(12,074)	69.71
Vested and issued	(97,123)	64.01
Unvested as of December 31, 2017	214,938	$ 68.62

In connection with the grant of restricted shares, the Company recognized $6.1 million, $6.6 million and $6.2 million of compensation expense within its income statements for the years ended December 31, 2018, 2017, and 2016, respectively. In addition, the Company recognized $0.2 million, $0.3 million, and $0.1 million of compensation expense within its income statement for the year ended December 31, 2018, 2017 and 2016, respectively, for shares of the Company's subsidiaries granted to the management team of those subsidiaries.

The unvested shares as of December 31, 2018 represent $9.0 million in unamortized stock based compensation which will be recognized over a weighted average period of 2.5 years.

12. INCOME TAXES

Tax Reform

The Tax Cuts and Jobs Act of 2017 ("2017 Tax Act" also commonly referred to as U.S. tax reform), which was signed into law on December 22, 2017, has resulted in significant changes to the U.S. corporate income tax system and the U.S. Virgin Islands mirror code which replaces "United States" with "U.S. Virgin Islands" throughout the Internal Revenue Code. These changes include a U.S. federal statutory rate reduction from 35% to 21%, which results in a U.S. Virgin Islands rate change of 38.5% to 23.1% under the mirror tax code which allows for a 10% surcharge on the U.S. federal tax rate, 100% expensing of certain qualified capital investments, the elimination or reduction of the alternative minimum tax regime, certain domestic deductions and credits and limitations on the deductibility of interest expense and executive compensation.

The Tax Act also transitions international taxation from a worldwide system to a modified territorial system and includes two base erosion prevention measures on non-U.S. earnings, which has the effect of subjecting certain earnings of the Company's foreign subsidiaries to U.S. taxation as global intangible low taxed income ("GILTI") and eliminates the deduction of certain payments made to related foreign corporations, and imposes a minimum tax if greater than regular tax under the base-erosion and anti-abuse tax ("BEAT"). These changes became effective beginning in 2018. The Tax Act also includes a one-time mandatory deemed repatriation tax on accumulated foreign subsidiaries' previously untaxed foreign earnings ("the Transition Toll Tax").

Transition Toll Tax

The Tax Act eliminates the deferral of U.S. income tax on the historical unrepatriated earnings by imposing the Transition Toll Tax, which is a one-time mandatory deemed repatriation tax on undistributed foreign earnings. The Transition Toll Tax is assessed on the U.S. shareholder's share of the foreign corporation's accumulated foreign earnings that have not previously been taxed. Earnings in the form of cash and cash equivalents will be taxed at a rate of 15.5% and all other earnings will be taxed at a rate of 8.0%.

Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Act, the Company made reasonable estimates of the effects and recorded provisional amounts in its consolidated financial statements as of December 31, 2017. During 2018, the Company made adjustments to the provisional amounts, including a $3.2 million provision on the deemed repatriation of undistributed foreign earnings in addition to the $7.4 million provision recorded at year-end. The Company has completed its determination of the accounting implications for charges related to the Transition Toll Tax.

At December 31, 2018, the Company continues to assert its earnings are permanently reinvested outside the U.S.. Cash dividends from Guyana was made in 2018, however these distributions are not subject to Guyanese withholding tax and the U.S. state tax impact is minimal.

Effect on Deferred Tax Assets and Liabilities and other Adjustments

The Company's deferred tax assets and liabilities are measured at the enacted tax rate expected to apply when these temporary differences are expected to be realized or settled. As the Company's deferred tax liabilities exceed the balance of its deferred tax assets at the date of enactment, the Company recorded a tax benefit of $18.0 million in 2017,

reflecting the decrease in the U.S. and U.S. Virgin Islands corporate income tax rates, including the state impact, net of federal benefit. An additional adjustment of $0.4 million was recorded in the three-month period ending September 30, 2018 for temporary differences finalized with the filing of the 2017 tax return. The Company has completed its accounting for the measurement of deferred taxes.

The BEAT provisions in the Tax Act eliminate the deduction of certain base-erosion payments made to related foreign corporations, and impose a minimum tax if greater than regular tax. The Company does not expect it will be subject to this tax and therefore have not included any tax impacts of BEAT in its consolidated financial statements for the year ended December 31, 2018. Based on the Company's calculation under the GILTI rules, it does not have an inclusion as of December 31, 2018.

Status of the Company's Assessment

In accordance with SAB 118, the Company has completed its determination of the accounting implications of the Tax Act as of December 22, 2018.

The components of income before income taxes for the years ended December 31, 2018, 2017 and 2016 are as follows (in thousands):

	2018	2017	2016
Domestic	$ 28,917	$ 25,232	$ 28,047
Foreign	24,825	22,321	17,327
Total	$ 53,742	$ 47,553	$ 45,374

The following is a reconciliation from the tax computed at statutory income tax rates to the Company's income tax expense for the years ended December 31, 2018, 2017, and 2016 (in thousands):

	2018	2017	2016
Tax computed at statutory U.S. federal income tax rates	$ 11,286	$ 16,644	$ 15,782
Non-controlling interest	(1,114)	(2,887)	(2,893)
Foreign tax rate differential	(2,716)	(6,621)	(3,074)
Over (under) provided in prior periods	(4,683)	(18)	1,069
Nondeductible expenses	1,610	929	1,134
Goodwill Impairment	—	—	2,622
Capitalized transactions costs	62	53	3,138
Change in tax reserves	10,657	4,433	2,561
State Taxes, net of federal benefit	1,674	1,075	1,853
Change in valuation allowance	1,539	6,137	(7,292)
Foreign tax credit expiration	—	—	4,179
Refund Claim for Domestic Production Deduction	235	(3,382)	—
Tax Cuts and Jobs Act of 2017	(148)	(10,639)	—
Capital loss	15	(6,990)	—
Other, net	453	(75)	2,081
Total Income Tax Expense	$ 18,870	$ (1,341)	$ 21,160

The components of income tax expense (benefit) for the years ended December 31, 2018, 2017 and 2016 are as follows (in thousands):

	2018	2017	2016
Current:			
United States—Federal	$ 24,546	$ 375	$ 15,763
United States—State	4,506	500	505
Foreign	13,060	11,289	10,528
Total current income tax expense	$ 42,112	$ 12,164	$ 26,796
Deferred:			
United States—Federal	$ (17,947)	$ (10,892)	$ (1,880)
United States—State	(2,832)	950	(291)
Foreign	(2,463)	(3,563)	(3,465)
Total deferred income tax expense (benefit)	$ (23,242)	$ (13,505)	$ (5,636)
Consolidated:			
United States—Federal	$ 6,599	$ (10,517)	$ 13,883
United States—State	1,674	1,450	214
Foreign	10,597	7,726	7,063
Total income tax expense (benefit)	$ 18,870	$ (1,341)	$ 21,160

The significant components of deferred tax assets and liabilities are as follows as of December 31, 2018 and 2017 (in thousands):

	2018	2017
Deferred tax assets:		
Receivables reserve	$ 3,087	$ 1,524
Temporary differences not currently deductible for tax	9,035	7,869
Deferred compensation	784	1,446
Pension	635	245
Net operating losses	29,496	26,685
Tax Credits	645	8,969
Total deferred tax asset	43,682	46,738
Deferred tax liabilities:		
Property, plant and equipment, net	14,608	35,630
Intangible assets, net	5,959	5,817
Total deferred tax liabilities	20,567	41,447
Valuation allowance	(31,442)	(35,829)
Net deferred tax liabilities	$ (8,327)	$ (30,538)

Deferred tax assets and liabilities are reflected in the accompanying consolidated balance sheets as follows (in thousands):

	2018	2017
Deferred tax assets:		
Current	$ —	$ —
Long term	1,949	1,194
Total deferred tax asset	$ 1,949	$ 1,194
Deferred tax liabilities:		
Current	$ —	$ —
Long term	(10,276)	(31,732)
Total deferred tax liabilities	$ (10,276)	$ (31,732)
Net deferred tax liabilities	$ (8,327)	$ (30,538)

The Company's effective tax rate for the year ended December 31, 2018 and 2017 was 35.1% and (2.8)%, respectively. The effective tax rate for the year ended December 31, 2018 was primarily impacted by the following items: (i) a $10.6 million net increase of unrecognized tax positions, (ii) a $4.7 million net benefit to record a return to accrual adjustment, (iii) a $1.2 million benefit to recognize a capital loss carryover due to capital gains on sales of wireless licenses, (iv) a $1.4 million net benefit to record a valuation allowance release on an indefinite lived intangible asset, (v) a $1.7 million provision associated with the intercompany sale of assets from the U.S. to the U.S. Virgin Islands, and (vi) the mix of income generated among the jurisdictions in which the Company operates along with the exclusion of losses in jurisdictions where the Company cannot benefit from those losses as required by ASC 740-270-30-36(a), primarily in the U.S. Virgin Islands and India.

The effective tax rate for the year ended December 31, 2017 was primarily impacted by the following items: (i) a $10.6 million benefit for the net impact of the 2017 Tax Act which includes lowering the U.S. corporate income tax rate to 21% effective in 2018 resulting in an $18.0 million benefit from the remeasurement of the deferred tax assets and liabilities, which was partially offset by a provision of $7.4 million on the deemed repatriation of undistributed foreign earnings (ii) a $3.9 million benefit for the net capital transactions related to the Company’s businesses in New England, New York, the British Virgin Islands, and St. Maarten, (iii) a $3.4 million benefit for an amended return refund claim filed for tax year 2013, (iv) a $4.4 million increase (net) in unrecognized tax benefits related to current year and prior year positions, (v) a $6.1 million provision (net) to record the change in valuation allowance and, (vi) the mix of income generated among the jurisdictions in which the Company operates.

As of December 31, 2018, the Company estimated that it had gross federal and foreign net operating loss (“NOL”) carryforwards of $1.2 million and $115.8 million respectively. Of these, $64.0 million will expire between 2024 and 2037 and $53.1 million may be carried forward indefinitely.

The Company assesses available positive and negative evidence to estimate if sufficient future taxable income will be generated to realize the existing deferred tax assets. A significant piece of negative evidence evaluated is cumulative losses incurred in certain reporting jurisdictions over the three-year period ended December 31, 2018. Other negative evidence examined includes, but is not limited to, losses expected in early future years, a history of tax benefits expiring unused, uncertainties whose unfavorable resolution would adversely affect future results, and brief carryback, carry forward periods. On the basis of this evaluation, the Company believed it was more likely than not that the benefit from some of these federal, state, and foreign deferred taxes would not be realized.

In recognition of this risk at December 31, 2018 the Company has provided a valuation allowance against certain foreign deferred tax assets of $31.4 million. The foreign valuation allowance primarily relates to foreign net operating losses of $29.1 million, while the remaining $2.3 million is on other net foreign deferred tax assets which the Company does not expect to be able to realize. At December 31, 2017, the Company’s federal and foreign NOL carryforward valuation allowances were $1.9 million and $24.3 million, respectively. The federal foreign tax credit valuation allowance was $8.2 million and the remaining valuation allowance of $1.4 million was applied to the other foreign deferred taxes for entities with a full valuation allowance at December 31, 2017.

As of December 31, 2018, the Company has approximately $119.7 million of undistributed earnings of its foreign subsidiaries, which are considered to be indefinitely reinvested. As such, the Company has not provided deferred tax on those earnings. The Company received $51.6 million of cash distributions from GTT in 2018 but does not anticipate dividends in the future.

The Company had unrecognized tax benefits (including interest and penalty) of $34.7 million as of December 31, 2018, $24.1 million as of December 31, 2017 and, $20.0 million as of December 31, 2016. The net increase of the reserve during the year ended December 31, 2018 was attributable to an increase in tax positions for prior periods of $8.8 million, a net increase in tax positions for the current period of $3.4 million and partially offset by a lapse in statute of a prior year position of $1.6 million.

The following shows the activity related to unrecognized tax benefits (not including interest and penalty) during the three years ended December 31, 2018 (in thousands):

Gross unrecognized tax benefits at December 31, 2015	$ 17,216
Increase in unrecognized tax benefits taken during a prior period	561
Increase in unrecognized tax benefits taken during the current period	2,321
Lapse in statute of limitations	(1,673)
Settlements	(521)
Gross unrecognized uncertain tax benefits at December 31, 2016	17,904
Increase in unrecognized tax benefits taken during a prior period	—
Increase in unrecognized tax benefits taken during the current period	3,394
Lapse in statute of limitations	(2)
Settlements	(335)
Gross unrecognized uncertain tax benefits at December 31, 2017	20,961
Increase in unrecognized tax benefits taken during a prior period	7,293
Increase in unrecognized tax benefits taken during the current period	3,408
Lapse in statute of limitations	(1,430)
Settlements	—
Gross unrecognized uncertain tax benefits at December 31, 2018	$ 30,232

The Company's accounting policy is to classify interest and penalties related to income tax matters as part of income tax expense. The accrued amounts for interest and penalties are $4.5 million as of December 31, 2018, and $3.1 million as of December 31, 2017, and $2.1 million as of December 31, 2016.

All $34.7 million of gross unrecognized uncertain tax benefits (including interest and penalty) would impact the effective tax rate if recognized.

The Company and its subsidiaries file income tax returns in the U.S. and in various, state and local and foreign jurisdictions. The statute of limitations related to the consolidated U.S. federal income tax return is closed for all tax years up to and including 2012. The federal tax audits are closed through 2014. There are no tax audits currently in progress. The expiration of the statute of limitations related to the various state and foreign income tax returns that the Company and subsidiaries file varies by jurisdiction.

13. RETIREMENT PLANS

The Company has noncontributory defined benefit pension plans for eligible employees of its GTT and Viya subsidiaries who meet certain age and employment criteria. The Company also has a noncontributory defined medical, dental, vision, and life benefit plan for eligible employees of its Viya subsidiary who meet certain age and employment criteria. The Company acquired the Viya plans as a result of the July 2016 Viya Acquisition. The Company reviews the funded status of its pension plans and makes contributions based on that analysis. The benefits are based on the

participants' compensation during their employment and the credited service years earned by participants. The Company funds the other postretirement benefit plans as benefits are paid.

The weighted-average rates assumed in the actuarial calculations for the pension and other postretirement benefit plans are as follows as of December 31, 2018, 2017 and 2016:

	2018	2017	2016
Discount Rate – Pension Benefit Obligation	4.7 %	4.2 %	4.6 %
Discount Rate – Pension Benefit Cost	4.3 %	4.6 %	4.3 %
Discount Rate – Postretirement Benefit Obligation	4.5 %	3.9 %	4.3 %
Discount Rate – Postretirement Benefit Cost	3.9 %	4.3 %	3.9 %
Annual salary increase	6.5 %	6.5 %	6.5 %
Expected long-term return on plan assets	6.1 %	6.1 %	6.3 %

The expected long-term rate of return on plan assets was determined based on several factors including input from pension investment consultants, projected long-term returns of equity and bond indices, and historical returns over the life of the related obligations of the fund. The Company, in conjunction with its pension investment consultants, reviews its asset allocation periodically and rebalances its investments when appropriate in an effort to earn the expected long-term returns. The Company will continue to evaluate its long-term rate of return assumptions at least annually and will adjust them as necessary.

The annual salary increase assumption reflects the Company's estimated long term average rate of salary increases. The assumption is not applicable to the Viya pension and other postretirement plans as the obligations associated with these plans are not dependent on participant's salaries.

The discount rate was determined based on a review of market data including yields on high quality corporate bonds with maturities approximating the remaining life of the project benefit obligations.

The other postretirement benefit plans healthcare cost trend assumptions is based on health care trend rates. The 2019 assumed medical health care cost trend rate is 6% trending to an ultimate rate of 4% in 2073. The 2019 and ultimate assumed dental care cost trend rate is 4%. The effect of a one-percentage-point increase in the assumed health care cost trend rates for each future year on the accumulated postretirement benefit obligation for health care benefits and the aggregate of the service and interest cost components of net periodic postretirement health care benefit cost is shown below:

	2018		2017	
	Accumulated postretirement benefit obligation	Service cost plus interest cost	Accumulated postretirement benefit obligation	Service cost plus interest cost
At trend	4,013	308	5,308	389
At trend + 1%	4,305	338	5,723	429
Dollar Impact	292	30	415	40
Percentage Impact	7.3 %	9.7 %	7.8 %	10.3 %
At trend – 1%	3,755	282	4,944	355
Dollar Impact	(258)	(26)	(364)	(34)
Percentage Impact	(6.4)%	(8.4)%	(6.9)%	(8.7)%

Changes during the year in the projected benefit obligations and in the fair value of plan assets are as follows for 2018 and 2017 (in thousands):

	2018		2017	
	Pension Benefits	Postretirement Benefits	Pension Benefits	Postretirement Benefits
Projected benefit obligations:				
Balance at beginning of year:	$ 80,355	$ 5,307	$ 76,119	$ 5,108
Service cost	1,794	147	1,676	183
Interest cost	3,279	161	3,388	206
Benefits and settlements paid	(4,524)	(360)	(3,942)	(367)
Actuarial (gain) loss	(4,295)	(272)	3,114	177
Experience (gain) loss	291	(971)	—	—
Balance at end of year	$ 76,900	$ 4,012	$ 80,355	$ 5,307
Plan net assets:				
Balance at beginning of year:	$ 80,892	$ —	$ 75,331	$ —
Actual return on plan assets	(730)	—	8,789	—
Company contributions	1,830	360	842	367
Benefits and settlements paid	(4,462)	(360)	(4,070)	(367)
Balance at end of year	$ 77,530	$ —	$ 80,892	$ —
Over/ (Under) funded status of plan	$ 630	$ (4,012)	$ 537	$ (5,307)

The Company reports an asset or liability on its balance equal to the funded status of its pension and other postretirement benefit plans. Plans in an overfunded status are aggregated and recorded as a net benefit asset in other assets. Plans in an underfunded status are aggregated and recorded as a net benefit liability in other liabilities. The funded status of the Company's pension and other retirement benefit plans is below (in thousands):

	2018			2017		
	GTT Pension Benefit	Viya Pension Benefit	Postretirement Benefits	GTT Pension Benefit	Viya Pension Benefit	Postretirement Benefits
Projected benefit obligation	$ 14,712	$ 62,188	$ 4,012	$ 13,205	$ 67,150	$ 5,307
Plan Net Assets	14,105	63,425	—	10,307	70,585	—
Over/ (Under) funded status of plan	$ (607)	$ 1,237	$ (4,012)	$ (2,898)	$ 3,435	$ (5,307)

The Company's investment policy for its pension assets is to have a reasonably balanced investment approach, with a long-term bias toward debt investments. The Company's strategy allocates plan assets among equity, debt and other assets to achieve long-term returns without significant risk to principal. The GTT pension fund has limitations from investing in the equity, debt or other securities of the employer, its subsidiaries or associates of the employer or any company of which the employer is a subsidiary or an associate. Furthermore, the GTT plan must invest between 70% - 80% of its total plan assets within Guyana.

The fair values for the pension plan's net assets, by asset category, at December 31, 2018 are as follows (in thousands):

Asset Category	Total	Level 1	Level 2	Level 3
Cash, cash equivalents, money markets and other	$ 5,173	$ 5,173	$ —	$ —
Common stock	23,052	18,760	4,292	—
Mutual funds - fixed income	16,444	—	16,444	—
Mutual funds - equities	13,099	4,748	8,351	—
Fixed income securities	18,095	—	18,095	—
Other	1,667	1,177	—	490
Total	$ 77,530	$ 29,858	$ 47,182	$ 490

The fair values for the pension plan's net assets, by asset category, at December 31, 2017 are as follows (in thousands):

Asset Category	Total	Level 1	Level 2	Level 3
Cash, cash equivalents, money markets and other	$ 6,363	$ 6,363	$ —	$ —
Common stock	28,467	25,312	3,155	—
Mutual funds - equities	9,248	9,248	—	—
Exchange traded funds - equities	904	904	—	—
Fixed income securities	35,414	—	35,414	—
Annuities	496	—	—	496
Total	$ 80,892	$ 41,827	$ 38,569	$ 496

The plan's weighted-average asset allocations at December 31, 2018 and 2017, by asset category are as follows:

	2018	2017
Cash, cash equivalents, money markets and other	7 %	8 %
Common stock	30	35
Mutual funds - fixed income	21	—
Mutual funds - equities	17	11
Fixed income securities	23	44
Other	2	2
Total	100 %	100 %

Amounts recognized on the Company's consolidated balance sheets consist of (in thousands):

	As of December 31,			
	2018		2017	
	Pension benefits	Postretirement benefits	Pension benefits	Postretirement benefits
Accrued and current liabilities	$ —	$ 271	$ —	$ 392
Other Liabilities	744	3,742	2,898	4,915
Other Assets	1,375	—	3,435	—
Accumulated other comprehensive income, net of tax	938	1,350	2,953	174

Amounts recognized in accumulated other comprehensive loss consist of (in thousands):

	As of December 31,			
	2018		2017	
	Pension benefits	Postretirement benefits	Pension benefits	Postretirement benefits
Net actuarial gain	$ 30	$ 1,350	$ 1,408	$ 174
Accumulated other comprehensive income, pre-tax	30	1,350	1,408	174
Accumulated other comprehensive income, net of tax	938	1,350	2,953	174

Components of the plan's net periodic pension cost are as follows for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	2018		2017		2016	
	Pension benefits	Postretirement benefits	Pension benefits	Postretirement benefits	Pension benefits	Postretirement benefits
Service cost	$ 1,794	$ 147	$ 1,676	$ 183	$ 1,308	$ 97
Interest cost	3,279	161	3,388	206	2,002	97
Expected return on plan assets	(4,835)	—	(4,470)	—	(2,024)	—
Amortization of actuarial (gain) loss	121	(67)	716	—	1,271	—
Curtailment	—	—	—	—	128	—
Net periodic pension cost	$ 359	$ 241	$ 1,310	$ 389	$ 2,685	$ 194

The Company does not plan to make any contributions to its pension and postretirement benefit plans during the year ending December 31, 2019.

The following estimated benefits, which reflect expected future service, as appropriate, are expected to be paid over the next ten years as indicated below (in thousands):

Fiscal Year	Pension Benefits	Postretirement Benefits
2019	$ 5,022	$ 277
2020	4,292	255
2021	4,452	237
2022	5,079	261
2023	4,355	236
2024-2028	23,534	1,535
	$ 46,734	$ 2,801

14. COMMITMENTS AND CONTINGENCIES

Regulatory and Litigation Matters

The Company and its subsidiaries are subject to certain regulatory and legal proceedings and other claims arising in the ordinary course of business, some of which involve claims for damages and taxes that are substantial in amount. The Company believes that, except for the items discussed below, for which the Company is currently unable to

predict the final outcome, the disposition of proceedings currently pending will not have a material adverse effect on the Company's financial position or results of operations.

The Company's Guyana subsidiary, GTT, holds a license to provide domestic fixed services and international voice and data services in Guyana on an exclusive basis until December 2030. Since 2001, the Government of Guyana has stated its intention to introduce additional competition into Guyana's telecommunications sector. In connection therewith, the Company and GTT have met on several occasions with officials of the Government of Guyana to discuss potential modifications of GTT's exclusivity and other rights under the existing agreement and license. On July 18, 2016, the Guyana Parliament passed telecommunications legislation, and on August 5, 2016, the legislation was signed into law that introduces material changes to many features of Guyana's existing telecommunications regulatory regime with the intention of creating a more competitive market. The legislation does not have the effect of terminating the Company's exclusive license. Instead the legislation as passed requires the Minister of Telecommunications to conduct further proceedings and issue implementing orders to enact the various provisions of the legislation, including the issuance of competing licenses. The Company cannot predict the manner in which or when the legislation will be implemented by the Minister of Telecommunications.

In January 2018 the Government of Guyana and the Company met to discuss modifications of the Company's exclusivity rights and other rights under its existing agreement and license. Those discussions are on-going, however, there can be no assurance that those discussions will be concluded before the Government issues new licenses contemplated by the legislation or at all, or that such discussions will satisfactorily address the Company's contractual exclusivity rights. Although the Company believes that it would be entitled to damages or other compensation for any involuntary termination of its contractual exclusivity rights, it cannot guarantee that the Company would prevail in a proceeding to enforce its rights or that its actions would effectively halt any unilateral action by the Government.

Historically, GTT has been subject to other litigation proceedings and disputes in Guyana that, while not conclusively resolved, to the Company's knowledge have not been the subject of discussions or other significant activity in the last five years. It is possible, but the Company believes unlikely, that these disputes, as discussed below, may be revived. The Company believes that none of these additional proceedings would, in the event of an adverse outcome, have a material impact on the Company's consolidated financial position, results of operation or liquidity.

In a letter dated September 8, 2006, the National Frequency Management Unit ("NFMU") agreed that total spectrum fees in Guyana should not increase for the years 2006 and 2007. However, that letter implied that spectrum fees in 2008 and onward may be increased beyond the amount GTT agreed to with the Government. GTT has objected to the NFMU's proposed action and reiterated its position that an increase in fees prior to development of an acceptable methodology would violate the Government's prior agreement. In 2011, GTT paid the NFMU $2.6 million representing payments in full for 2008, 2009 and 2010. However, by letter dated November 23, 2011, the NFMU stated that it did not concur with GTT's inference that the amount was payment in full for the specified years as it was NFMU's continued opinion that the final calculation for spectrum fees was not agreed upon and was still an outstanding issue. By further letter dated November 24, 2011, the NFMU further rejected a proposal that was previously submitted jointly by GTT and another communications provider that outlined a recommended methodology for the calculation of these fees. The NFMU stated that it would prepare its own recommendation for consideration by the Minister of Telecommunications, who would decide the matter. GTT has paid undisputed spectrum fees according to the methodology used for its 2011 payments, and has reserved amounts payable according to this methodology. There have been limited further discussions on this subject and GTT has not had the opportunity to review any recommendation made by the NFMU to the Minister.

In November 2007, Caribbean Telecommunications Limited ("CTL") filed a complaint in the U.S. District Court for the District of New Jersey against GTT and ATN claiming breach of an interconnection agreement for domestic cellular services in Guyana and related claims. CTL asserted over $200 million in damages. GTT and ATN moved to dismiss the complaint on procedural and jurisdictional grounds. On January 26, 2009, the court granted the motions to dismiss the complaint on the grounds asserted. In November 2009 and again in April 2013, CTL filed and then abandoned a similar claim against GTT and the Public Utility Commission in the High Court of Guyana. CTL once more filed a similar claim against the Company in December 2017, seeking damages of $25 million; however, this matter was dismissed in May 2018. CTL made an untimely filing for an appeal thereafter, which the court subsequently denied. The Company continues to believe this claim is without merit and intends to vigorously defend against it.

On May 8, 2009, a GTT competitor, Digicel, filed a lawsuit in Guyana challenging the legality of GTT's exclusive license rights under Guyana's constitution. Digicel initially filed this lawsuit against the Attorney General of Guyana. On May 13, 2009, GTT petitioned to intervene in the suit in order to oppose Digicel's claims and GTT's petition was granted on May 18, 2009. GTT filed an answer to the charge on June 22, 2009. The case remains pending. The Company believes that any legal challenge to GTT's exclusive license rights granted in 1990 is without merit and the Company intends to defend vigorously against such legal challenge.

GTT has filed several lawsuits in the High Court of Guyana asserting that, despite its denials, Digicel is engaged in international bypass in violation of GTT's exclusive license rights, the interconnection agreement between the parties, and the laws of Guyana. GTT is seeking injunctive relief to stop the illegal bypass activity and money damages. Digicel filed counterclaims alleging that GTT has violated the terms of the interconnection agreement and Guyana laws. These suits, filed in 2010 and 2012, have been consolidated with Digicel's constitutional challenge described above and is scheduled to proceed to trial in the second quarter of 2019. GTT intends to prosecute these matters vigorously.

GTT is also involved in several legal claims regarding its tax filings with the Guyana Revenue Authority dating back to 1991 regarding the deductibility of intercompany advisory fees as well as other tax assessments. The Company maintains that any liability GTT might be found to have with respect to the disputed tax assessments, totaling $44.1 million, would be offset in part by the amounts necessary to ensure that GTT's return on investment was no less than 15% per annum for the relevant periods. The Company believes that some adverse outcome is probable and has accordingly accrued $5.0 million as of December 31, 2018 for these matters.

Lease Commitments and Other Obligations

The Company leases approximately 2.5 million square feet for its operations centers, administrative offices and retail stores as well as certain tower sites under non-cancelable operating leases. The Company's obligations for payments under these leases are as follows at December 31, 2018 (in thousands):

2019	$ 21,941
2020	18,813
2021	12,406
2022	8,466
2023	4,142
Thereafter	5,991
Total obligations under operating leases	$ 71,759

Rent expense for the years ended December 31, 2018, 2017 and 2016 was $21.1 million, $20.9 million and $19.8 million, respectively.

15. RELATED-PARTY TRANSACTIONS

In October 2014, the Company's U.S. Virgin Islands business, Choice Communications, LLC ("Choice"), entered into a tower lease with Tropical Tower Ltd ("Tropical Tower"), an entity 90% owned by Cornelius B. Prior, Jr., the former Chairman of the Company's Board of Directors. When aggregated with amounts that Choice currently pays to Tropical Tower for an existing tower lease entered into in April 2012, Choice will pay approximately $117,000 per year in rental payments to Tropical Tower. Each tower lease has an initial term of five years, with two additional five-year renewal periods and has provisions for an increase in rent by 5% each year. The Company's Audit Committee reviewed the specific structure and terms of the October 2014 lease, as negotiated by Choice management, and unanimously approved the arrangement described above in accordance with the terms of the Company's Related Person Transaction Policy.

16. SEGMENT REPORTING

The Company has the following three reportable and operating segments: i) U.S. Telecom, ii) International Telecom, and iii) Renewable Energy.

The following tables provide information for each operating segment (in thousands):

For the Year Ended December 31, 2018

	U.S. Telecom	International Telecom	Renewable Energy	Corporate and Other (1)	Consolidated
Revenue					
Wireless	$ 108,878	$ 89,946	$ —	$ —	$ 198,824
Wireline	6,602	223,623	—	—	230,225
Renewable Energy	—	—	22,158	—	22,158
Total Revenue	115,480	313,569	22,158	—	451,207
Depreciation and amortization	24,615	48,889	6,589	5,626	85,719
Non-cash stock-based compensation	—	88	105	6,227	6,420
Operating income (loss)	36,813	45,022	13,440	(34,252)	61,023

For the Year Ended December 31, 2017

	U.S. Telecom	International Telecom	Renewable Energy	Corporate and Other (1)	Consolidated
Revenue					
Wireless	$ 143,028	$ 89,473	$ —	$ —	$ 232,501
Wireline	12,695	215,132	—	—	227,827
Renewable Energy	—	—	20,865	—	20,865
Total Revenue	155,723	304,605	20,865	—	481,193
Depreciation and amortization	25,601	50,007	6,668	4,658	86,934
Non-cash stock-based compensation	—	188	114	6,675	6,977
Operating income (loss)	55,317	28,308	5,179	(33,496)	55,308

For the Year Ended December 31, 2016

	U.S. Telecom	International Telecom	Renewable Energy	Corporate and Other (1)	Consolidated
Revenue					
Wireless	$ 150,044	$ 94,360	$ —	$ —	$ 244,404
Wireline	26,683	163,915	—	—	190,598
Renewable Energy	—	—	22,001	—	22,001
Total Revenue	176,727	258,275	22,001	—	457,003
Depreciation and amortization	24,470	40,493	4,987	6,030	75,980
Non-cash stock-based compensation	—	22	114	6,274	6,410
Operating income (loss)	49,078	36,910	(246)	(34,472)	51,270

	U.S. Telecom	International Telecom	Renewable Energy	Corporate and Other (1)	Consolidated
December 31, 2018					
Cash, Cash equivalents, and Investments	$ 19,118	$ 32,390	$ 62,678	$ 78,043	$ 192,229
Total current assets	36,801	75,304	80,553	83,107	275,765
Fixed assets, net	78,102	482,770	45,599	20,381	626,852
Goodwill	35,269	25,421	3,280	—	63,970
Total assets	172,634	622,454	130,427	181,789	1,107,304
Total current liabilities	15,783	82,575	3,465	38,827	140,650
Total debt	—	90,970	12	—	90,982
December 31, 2017					
Cash, Cash equivalents, and Investments	$ 19,585	$ 110,700	$ 8,120	$ 76,627	$ 215,032
Total current assets	40,975	190,396	18,060	93,497	342,928
Fixed assets, net	99,462	367,485	158,447	17,752	643,146
Goodwill	35,269	25,421	3,280	—	63,970
Total assets	200,142	629,007	192,406	184,050	1,205,605
Total current liabilities	41,248	91,887	14,754	13,816	161,705
Total debt	—	94,577	61,215	—	155,792

	Capital Expenditures				
Year ended December 31,	**U.S. Telecom**	**International Telecom**	**Renewable Energy**	**Corporate and Other (1)**	**Consolidated**
2018	$ 13,389	$ 160,013 (2)	$ 4,515	$ 8,004	$ 185,921
2017	22,230	80,912	32,738	6,491	142,371

(1) Reconciling items refer to corporate overhead expenses and consolidating adjustments.

(2) Includes $80.2 million of expenditures used to rebuild the Company's damaged networks in the U.S. Virgin Islands which was impacted by the Hurricanes. These expenditures were financed, in part, by the $34.6 million of insurance proceeds the Company received during the first quarter of 2018.

The table below identifies the Company's revenues and long-lived assets by geographic location. The Company attributes revenue to geographic location based on location of the customer (in thousands):

	2018		2017		2016	
	Revenues	**Long-Lived Assets**	**Revenues**	**Long-Lived Assets**	**Revenues**	**Long-Lived Assets**
U.S.	$ 132,288	$ 234,514	$ 173,632	$ 358,032	$ 198,300	$ 265,528
Guyana	102,056	151,084	93,524	129,909	91,653	132,609
U.S Virgin Islands	79,785	216,173	83,194	137,018	58,431	110,773
Bermuda	103,281	137,992	127,244	165,243	83,006	94,976
Other Foreign Countries	33,797	91,774	3,599	71,282	25,613	76,575
	$ 451,207	$ 831,538	$ 481,193	$ 861,484	$ 457,003	$ 680,461

17. QUARTERLY FINANCIAL DATA (UNAUDITED)

Following is a summary of the Company's quarterly results of operations for the years ended December 31, 2018 and 2017 (in thousands):

	2018 Consolidated for the Three Months Ended			
	March 31	June 30	September 30	December 31
Total revenue	$ 104,475	$ 117,788	$ 121,138	$ 107,806
Operating expenses	100,266	102,035	90,395	97,488
Income from operations	4,209	15,753	30,743	10,318
Other income (expense), net	(2,591)	(2,885)	(2,823)	1,018
Income from continuing operations before income taxes	1,618	12,868	27,920	11,336
Income taxes	3,921	2,088	7,010	5,851
Net income (loss)	(2,303)	10,780	20,910	5,485
Net income attributable to non-controlling interests, net of tax	(3,252)	(3,564)	(3,887)	(4,354)
Net income (loss) attributable to ATN International, Inc. stockholders	$ (5,555)	$ 7,216	$ 17,023	$ 1,131
Net income (loss) per weighted average basic share attributable to ATN International, Inc. stockholders				
Total	(0.35)	0.45	1.07	0.07
Net income (loss) per weighted average diluted share attributable to ATN International, Inc. stockholders				
Total	(0.35)	0.45	1.07	0.07

	2017 Consolidated for the Three Months Ended			
	March 31	June 30	September 30	December 31
Total revenue	$ 128,115	$ 123,245	$ 122,132	$ 107,701
Operating expenses	110,359	107,442	141,697	66,387
Income from operations	17,756	15,803	(19,565)	41,314
Other income (expense), net	(3,044)	(2,298)	(2,295)	(118)
Income (loss) from continuing operations before income taxes	14,712	13,505	(21,860)	41,196
Income taxes	3,128	2,596	(884)	(6,181)
Net income (loss)	11,584	10,909	(20,976)	47,377
Net income attributable to non-controlling interests, net of tax	(4,725)	(5,026)	(3,784)	(3,871)
Net income (loss) attributable to ATN International, Inc. stockholders	$ 6,859	$ 5,883	$ (24,760)	$ 43,506
Net income (loss) per weighted average basic share attributable to ATN International, Inc. stockholders				
Total	0.42	0.36	(1.53)	2.71
Net income (loss) per weighted average diluted share attributable to ATN International, Inc. stockholders				
Total	0.42	0.36	(1.53)	2.71

SCHEDULE II

ATN INTERNATIONAL, INC. AND SUBSIDIARIES

VALUATION AND QUALIFYING ACCOUNTS

(Amounts in Thousands)

	Balance at Beginning of Year	Purchase Price Accounting	Charged to Costs and Expenses	Deductions	Balance at End of Year
YEAR ENDED, December 31, 2016					
Description:					
Valuation allowance on foreign tax credit carryforwards	$ 4,180	$ —	$	$ 4,180	$ —
Valuation allowance on foreign net operating losses and other deferred taxes	1,672	41,941	217	1,922	41,908
Valuation allowance on state net operating losses	1,962	—	—	1,409	553
Allowance for doubtful accounts	9,294	—	5,095	1,240	13,149
	$ 17,108	$ 41,941	$ 5,312	$ 8,751	$ 55,610
YEAR ENDED, December 31, 2017					
Description:					
Valuation allowance on foreign tax credit carryforwards	$ —	$ —	$ 8,226	$ —	$ 8,226
Valuation allowance on capital loss carryforwards	—	—	1,881	—	1,881
Valuation allowance on foreign net operating losses and other deferred taxes	41,908	—	839	17,025	25,722
Valuation allowance on state net operating losses	553	—	—	553	—
Allowance for doubtful accounts	13,149	—	3,993	2,119	15,023
	$ 55,610	$ —	$ 14,939	$ 19,697	$ 50,852
YEAR ENDED, December 31, 2018					
Description:					
Valuation allowance on foreign tax credit carryforwards	$ 8,226	$ —	$ (8,226)	$ —	$ —
Valuation allowance on capital loss carryforwards	1,881	—	(1,881)	—	—
Valuation allowance on foreign net operating losses and other deferred taxes	25,722	—	5,877	157	31,442
Allowance for doubtful accounts	15,023	—	5,134	3,695	16,462
	$ 50,852	$ —	$ 904	$ 3,852	$ 47,904

VERIFICATION

STATE: Arkansas
COUNTY: Pulaski

I, Rohan Ranaraja, declare:

I am the Executive Director of Government and Regulatory Affairs of Commnet Rural America, LLC and make this Verification.

I have read the foregoing APPLICATION OF COMMNET RURAL AMERICA, LLC FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY and know the contents thereof. I attest that the facts are true of my own knowledge.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 17th day of June, 2019 at Little Rock, Arkansas.

Rohan Ranaraja
Exec. Director – Government and Regulatory Affairs

SWORN TO AND SUBSCRIBED before me on the 17 day of June, 2019.

Notary Public

My Commission Expires: 11/14/2024