S&P Global
Market Intelligence

Cogent Communications Holdings, Inc. NasdaqGS:CCOI

Earnings Call

Thursday, November 7, 2024 1:30 PM GMT

CALL PARTICIPANTS 2
PRESENTATION 3
QUESTION AND ANSWER 8

Call Participants

EXECUTIVES

David Schaeffer

Founder, Chairman, CEO & President

Thaddeus G. Weed

VP, CFO & Treasurer

ANALYSTS

David William Barden

BofA Securities, Research Division

Gregory Bradford Williams

TD Cowen, Research Division

James Edward Schneider

Goldman Sachs Group, Inc., Research Division

Michael Ian Rollins

Citigroup Inc., Research Division

Nicholas Ralph Del Deo

MoffettNathanson LLC

Timothy Kelly Horan

Oppenheimer & Co. Inc., Research Division

Walter Paul Piecyk

LightShed Partners, LLC

Presentation

Operator

Good morning, and welcome to Cogent Communications Holdings Third Quarter 2024 Earnings Conference Call. As a reminder, this conference call is being recorded and will be available for replay at www.cogentco.com. A transcript of this conference call will be posted on Cogent's website when it becomes available. Cogent's summary of financial and operational results attached to this press release can be downloaded from the Cogent website. I would now like to turn the call over to Mr. Dave Schaeffer, Chairman and Chief Executive Officer of Cogent Communications Holdings. Please go ahead, sir.

David Schaeffer

Founder, Chairman, CEO & President

Thank you, and good morning to everyone. Welcome to our third quarter 2024 earnings conference call. I'm Dave Schaeffer, Cogent's Chief Executive Officer. And with me on this morning's call is Tad Weed, our Chief Financial Officer. Hopefully, you've had a chance to review our earnings press release. Our press release includes a number of historical quarterly metrics, which we present on a consistent basis every quarter. Now I'd like to take a moment to address some of the expected cost savings that we've been able to achieve. We are continuing to make substantial progress in realizing cost savings and synergies from the acquisition of the Sprint Global Markets business. Based on the difference between our monthly cost run rates in May of 2023 and September of 2024, we have realized \$165 million of these savings or approximately 75% of our targeted \$220 million in annual cost savings. These cost savings were initially expected to be achieved in their entirety by May of 2026. Our combined Cogent business had a very good quarter. Our total revenue was \$257.2 million for the quarter. Our revenue results for the quarter were impacted by the continuing grooming of low-margin off-net connections, the continued elimination of noncore products and low-margin business that with the reduction in revenues from the commercial services agreement that we have with T-Mobile. Revenues under our commercial services agreement with T-Mobile decreased sequentially by \$1.8 million to \$4.1 million for the guarter from \$5.9 million for Q2. Revenue from a low-margin resale customer contract, which was acquired in the Sprint acquisition, which we intentionally terminated was classified as on-net revenue and enterprise revenue and declined by \$3.5 million sequentially. Excluding the impact of these 2 results for our total revenue, our revenues would have increased by \$2.1 million or approximately 0.7% sequentially. Our noncore revenues also declined by another \$500,000 to \$4.1 million for the quarter. Our wavelength revenues increased sequentially by 45.8% to \$5.3 million and an increase of 76.7% on a year-over-year basis. Our IPv4 leasing revenue increased sequentially by 11.8% to \$12.8 million and increased 31.5% on a year-over-year basis. Our network traffic for the quarter increased by 8% sequentially and 19% on a year-over-year basis. Our EBITDA increased sequentially by \$8.7 million, and our EBITDA margin increased sequentially by 350 basis points to 13.9%. Our EBITDA as adjusted was \$60.9 million, and our EBITDA as adjusted margin was 23.7% for the guarter versus \$106.2 million and 40.8% for Q2 of 2024. The seguential change was due to the scheduled reduction of \$41.7 million in a decline in payments under our IP transit services agreement with T-Mobile, but was partially offset our \$8.7 million sequential increase in EBITDA. In accordance with our IP service transit agreement with T-Mobile, we received payments for the quarter totaling \$25 million. This compares to the payments that we received in the previous quarter of \$66.7 million. The payments for this quarter are 3 monthly payments of \$8.3 million, an additional 38 monthly payments of \$8.3 million per month will continue through November of 2027. These payments are included in our EBITDA as adjusted. We continue to realize cost reductions from the acquired expense base. Our SG&A decreased by \$4.9 million sequentially or 7.5%. Our SG&A as a percentage of revenue also decreased to 23.4% from 25% last quarter. Our cost of goods sold increased by \$5.3 million from the last quarter due to 2 major expenses, the additional costs involved in converting former Sprint switch sites in the Cogent data centers that were not capitalized and certain vendor contract termination costs. The primary contract that was terminated was a tri-party agreement. This was the first opportunity we had to buy out of that agreement and to end that relationship. However, over the course of the year, on a year-over-year basis, our cost of goods sold still decreased by \$12.1 million or 7%. Our gross debt to trailing 12 months EBITDA as adjusted ratio was 4.94 for the quarter, and our net debt ratio did increase from 3.14 last

quarter to 4.13, primarily as a result of the reduction in IP transit payments from T-Mobile. We ended the quarter with \$316.1 million of cash and cash equivalents on the balance sheet. Our sales force productivity improved in the quarter from 3.8 installed orders per rep per month in Q2 to 4 orders per rep per month in O3. In conjunction with the Sprint acquisition, we hired a total of 942 employees in May of 2023. At quarter's end, 635 of these employees remain with Cogent. Our wavelength business improved materially. In conjunction with the acquisition of the Sprint network, we expanded our product offering to include optical wavelength services over our fiber optic network. We began selling these services to existing customers as well as acquired customers from Sprint and new customers. At the end of the quarter, we had connectivity and wavelength sales capabilities in 657 locations throughout North America. However, with longer provisioning cycles than we are targeting. We have sold wavelength services now in slightly over 200 locations. By the end of 2024, we expect to be able to offer wavelength services in over 800 locations with a much more rapid provisioning cycle. We have a backlog and funnel of Wave opportunities of over 3,400 unique wavelengths. Our Sprint acquisition materially expanded our data center footprint. As of September 30, we have partially reconfigured 43 of the acquired facilities and added them to our network. These added data centers are in addition to the 1,627 carrier-neutral data centers that Cogent connects to. Today, there are 95 Cogent data centers, which have an aggregate condition protected power capacity of 169 megawatts. We are decommissioning some legacy Cogent leased data center facilities that are redundant with our fee simple-owned Sprint facilities. Our Board of Directors reflected on the progress that we have made and the cash flow generating capabilities of our business, the investment opportunities we have and again, decided to increase our quarterly dividend by \$0.01 per share, raising our quarterly dividend from \$0.985 per share per quarter to \$0.995 per share per quarter. This increase represents the 49th consecutive sequential increase in our regular quarterly dividend. This is a 4.2% annual dividend growth rate. We do expect the combined business of Sprint and Cogent to continue to achieve long-term average revenue growth of between 5% and 7%, and we expect adjusted EBITDA margins to expand on average over a multiyear period at roughly 100 basis points a year. Our revenue and EBITDA guidance are intended to be multiyear and not intended to be used as specific quarterly guidance or even specific annual guidance. Our EBITDA as adjusted and leverage ratios are impacted by the \$700 million that we received under the IP transit agreement with T-Mobile. Now I'd like to ask Tad to read our safe harbor language provide some additional operating performance metrics for the quarter, and then we will open the floor for questions and answers.

Thaddeus G. Weed

VP, CFO & Treasurer

Thank you, Dave, and good morning, everyone. This earnings conference call includes forward-looking statements, and these forward-looking statements are based upon our current intent, belief and expectations. These forward-looking statements and all other statements that may be made on this call that are not historical facts are subject to a number of risks and uncertainties, and actual results may differ materially. Please refer to our SEC filings for more information on the factors that could cause actual results to differ. Cogent undertakes no obligation to update or revise our forward-looking statements. And if we use any non-GAAP financial measures during this call, you will find these reconciled to the corresponding GAAP measurement in our earnings release that are posted on our website at cogentco.com. Some comments on corporate and NetCentric revenue and customer connections. We analyze our revenues based upon network connection type, which is on-net, off-net, wavelength, and noncore, and we also analyze our revenues based upon customer type. We classify all customers into 3 types: NetCentric, corporate and enterprise customers. On the corporate business, our corporate business represented 45.2% of our revenues for the quarter, and our quarterly corporate revenue decreased by 3.5% year-over-year and sequentially by 2.8%. The sequential decrease was primarily due to the continued grooming of low-margin off-net connections and the elimination of noncore products. We had 47,613 corporate connections on our network at quarter end. For the guarter, the sequential impact of USF on our corporate revenues was a positive \$600,000. NetCentric business. Our NetCentric business continues to benefit from continued growth in video traffic, activity related to artificial intelligence, streaming and wavelength sales. Our NetCentric business represented 35.7% of our revenues for the quarter and decreased by 3.2% year-over-year, but grew sequentially by 0.8%. Our NetCentric revenue under our commercial service agreement with T-Mobile declined by \$1.8 million sequentially and declined by \$3.9 million year-over-year, and that impacted our NetCentric revenue results. We had

62,273 NetCentric customer connections on our network at quarter end. On the enterprise business. Our enterprise business represented the remainder of our revenues of 19.1% this guarter and was \$49.1 million. We had 16,447 enterprise customer connections on our network at the end of the guarter. Our enterprise revenue decreased by 18.2% year-over-year and sequentially by 1.4% or by \$700,000. This was primarily due to a reduction in noncore and low-margin revenues. Revenue from a low-margin resale customer we acquired in the Sprint acquisition that Dave mentioned that we intentionally terminated and classified as on-net revenue and enterprise revenue declined sequentially by \$3.5 million. If you exclude this impact from this cancellation, our enterprise revenue would have increased sequentially by \$2.8 million or by 5.6%. On revenue and customer connections by network type, on-net revenue. We serve our on-net customers in our 3,424 total on-net multi-tenant office carrier-neutral data center buildings. We continue to succeed in selling larger 100 gigabit connections and 400 gigabit connections in carrier-neutral data centers and selling 10 gigabit connections in select multi-tenant office buildings. Our on-net revenue was \$136.5 million for the quarter, which was a year-over-year increase of 5.8%, but a sequential decrease of \$4.3 million or 3%. The decline in our on-net revenue under our commercial services agreement with T-Mobile and the cancellation of that low-margin resale customer negatively impacted our sequential on-net revenue results by an aggregate total of \$5.7 million. Exclusive again of these impacts, our on-net revenue would have increased sequentially by 1%. Our on-net customer connections were 87,655 at quarter end. Our off-net revenue. Our off-net revenue was \$111.3 million for the guarter, a year-over-year decrease of 14.8% and a seguential decrease of 0.1%. The seguential small decline in our off-net revenue was partially impacted again by migration of certain off-net customers to on-net and the continued grooming and termination of low-margin off-net contracts, which had more of an impact. Our off-net customer connections were 32,420 at quarter end. Our wavelength revenue was \$5.3 million for the quarter, a sequential increase of 45.8% and a year-over-year increase of 76.7%. Our wavelength customer connections were 1,041 at guarter end, a 38.1% sequential increase. Our IPv4 revenue. Our IPv4 leasing business had an excellent quarter. We were leasing \$12.9 million of the IPv4 addresses at the end of the quarter, and our IPv4 revenue increased by 11.8% from last quarter and increased by 31.5% year-over-year and was \$12.8 million for the quarter. Lastly, our noncore revenue was \$4.1 million for the guarter, a sequential decrease of \$500,000 or 10.2%. And again, due to our decision to end of life these noncore products, noncore customer connections were 5,217 at quarter end, a sequential decline of 33.8%. Some comments on pricing per megabit. Our average price per megabit for our installed base decreased sequentially by 8.5% to \$0.23 and 23.9% year-over-year, consistent with historical trends. Our average price per megabit for our new customer contracts for the quarter was \$0.09, which was a sequential decrease of 29% and 47% year-over-year. Comments on ARPU. Our onnet ARPU decreased sequentially by 3.1% from \$536 to \$520. Year-over-year, it was an increase of 9.4%. Our off-net ARPU increased sequentially by 3.2% from \$1,103 to \$1,138. Year-over-year, our off-net ARPU increased by 1%. Our wavelength ARPU increased by 17.6% and was \$1,964 this guarter compared to \$1,670 last quarter. The average revenue per IPv4 address sold was materially higher and was \$0.49 per address for the quarter. That was a 63.3% increase from an average of \$0.30 for the base of all addresses at the beginning of the quarter. Our on-net monthly churn rate was 1.2% for the quarter. That was an improvement from 1.4% last quarter. Our off-net unit monthly churn rate increased to 2.6% this quarter from 2.3% last quarter. Comments on EBITDA classic and EBITDA margin. We reconcile our EBITDA to our cash flow from operations in each of our quarterly press releases. Our EBITDA increased sequentially by \$8.7 million and our EBITDA margin increased sequentially by 350 basis points to 13.9%. Our EBITDA as adjusted includes adjustments for Sprint acquisition costs and cash payments received under the IP transit agreement with T-Mobile. We collected \$25 million under the IP transit services agreement this quarter, Last quarter, it was \$66.7 million, so a reduction of \$41.7 million. Our EBITDA as adjusted was \$60.9 million for the quarter. That was a 23.7% EBITDA as adjusted margin. Last quarter, it was \$106.2 million or 40.8%. The sequential change was due to the scheduled decline of \$41.7 million of payments under the IP transit agreement with T-Mobile, and that offset our sequential increase of \$8.7 million in EBITDA, and we incurred \$12.4 million of Sprint acquisition costs last quarter, we incurred none classified as Sprint acquisition costs this quarter as the 1-year anniversary of the Sprint acquisition ended in May 2024. Some comments on foreign currency. Our revenue earned outside of the United States is reported in U.S. dollars and was about 18% of our revenues for the quarter. About 11% of our revenues for the quarter were based in Europe and 6% the remainder related to Canada, Mexico, Oceanic, South American, and African operations. The average euro to USD rate so far this quarter was \$1.09 and the Canadian

dollar exchange rate was \$0.73. If those average rates remain at the current levels for the remainder of our fourth quarter, we estimate that the FX conversion impact on both sequential revenues and yearover-year would not be significant. Customer concentration. We believe that our revenue and customer base is not highly concentrated. Our top 25 customers represented 19% of our revenues this quarter, slightly down from 20% last quarter. CapEx. Our quarterly capital expenditures were \$59.2 million for the quarter. We are continuing our network integration of the former Sprint network and legacy Cogent network into one unified network and converting former Sprint switch sites into Cogent data centers. We have accelerated and expanded our data center conversion program due to the high level of demand for our power availability, and this program will require similar CapEx spending as we incurred this quarter per quarter through mid-2025. Some comments on finance leases. Our finance IRU obligations are for long-term dark fiber leases. Our IRU finance lease obligations were \$482.6 million at quarter end, and we have a very diverse set of IRU suppliers, and we have IRU contracts with 360 different dark fiber suppliers across the world. Cash and restricted cash. At quarter end, our cash and cash equivalents and restricted cash in the aggregate was \$316.1 million. Of our total \$36.9 million of cash that was restricted, \$29.9 million was tied to the fair value of our swap agreement and \$7 million was tied to the requirements under our IPv4 notes. Debt and debt ratios. Our total gross debt at par, including our finance IRU obligations, was \$1.9 billion at quarter end, and our net debt was \$1.6 billion. Our total gross debt to last 12 months EBITDA as adjusted ratio was 4.94 at quarter end, and our net debt ratio was 4.13. Our consolidated leverage ratio as calculated under our note indentures was 5.11 and our secured leverage ratio as calculated under our note indentures was 2.90. Our fixed coverage ratio as calculated under our note indentures was 3.08. Further comments on the swap. We are party to an interest rate swap agreement that modifies our fixed interest rate obligation associated with our \$500 million 2026 notes to a variable interest rate obligation based on secured overnight financing rate for the remaining term of our 2026 notes. The fair value of our swap agreement decreased from last quarter by \$5.6 million. Changes in the fair value of the swap agreement are classified in our public filings with interest expense as required under U.S. GAAP. Finally, comments on bad debt and DSO. Our DSO was 32 days for the quarter versus 26 days last quarter. Our bad debt expense was \$4.5 million and 1.8% of our revenues for the quarter. These increases were largely due to some collection issues associated with a large former Sprint customer that we since resolved after quarter end. And also just the calendar was unkind with the 30th being where it fell, and we incurred substantial cash the first week after the 30th. We want to again thank and recognize our worldwide billing and collections team members doing, again, a fantastic job in serving our Cogent customers. And with that, I will turn the call back over to Dave for some final remarks.

David Schaeffer

Founder, Chairman, CEO & President

Thanks, Tad. I'd like to highlight a couple of strengths on our network, customer base and sales force. We continue to experience substantial traffic growth accelerating in our NetCentric IP business. At quarter's end, we were in 1,627 carrier-neutral data centers and 95 Cogent-owned data centers, bringing that total to 1,722 facilities. The breadth of this coverage enables our NetCentric customers to better optimize their networks and reduce latency. We have a presence in 56 countries globally for these services. We expect to continue to widen this lead in the market and project adding over 100 carrier-neutral data centers to our network each year for the next several years. By the end of 2024, we expect to be able to sell wavelength services in over 800 North American carrier-neutral data centers with substantially reduced provisioning intervals. At quarter's end, we directly connected to 8,212 networks. 23 of these networks are peers and 8,189 of these networks are Cogent transit customers. We remain focused on our sales force. Our sales force productivity is dependent on managing out underperforming reps and training those reps that remain at the company to make them even more successful. Our sales force turnover rate was 6.7% per month for the quarter, down from a peak of 8.7% during the height of the pandemic, but still slightly above our historical average sales force turnover rate of 5.7% of the sales force per month. At quarter's end, we had 279 salespeople focused exclusively on the NetCentric market, 363 sales professionals focused on the corporate market and 13 sales professionals focused on the enterprise market. We remain optimistic about our unique position in serving small and medium-sized businesses with our IP-based services located in the central business districts of major North American cities with over 1,870 multitenant office buildings directly connected to our network, comprising over 1 billion square feet of rentable space. We are excited about the opportunity to continue to grow our profitable services to our large enterprise customer base. We are enthusiastic and optimistic about our optical transport business or

wavelength services and their addition to our product portfolio. We have a significant wavelength backlog, a funnel of over 3,400 wavelength opportunities. However, due to our longer provisioning cycles, we are not sure all of these orders will, in fact, be installed. We will substantially reduce that provisioning window by quarter end. We are diligently working to complete the integration of the Sprint network and the Cogent network and remain very confident about the cash flow generating capabilities of this combined operation. Based on the difference between monthly costs at closing versus September of 2024, we have realized \$165 million or 75% of our targeted \$220 million in annual cost reductions. We will continue to look at ways to monetize our unleased IPv4 addresses, our excess dark fiber and maybe most importantly, we are focusing on our excess data center capacity and power. We are marketing these on a wholesale basis, either as a direct sale or a long-term lease. Currently, we are in discussions with multiple counterparties for multiple sites. We have been taking feedback from those counterparties and accelerating the modification of these facilities to meet their requirements. With that, I'd like to open the floor for questions.

Question and Answer

Operator

[Operator Instructions] And our first question comes from the line of Jim Schneider from Goldman Sachs.

James Edward Schneider

Goldman Sachs Group, Inc., Research Division

I was wondering, Dave, if you could maybe just comment on the wavelengths business for a moment. Clearly, you had a nice uptick sequentially in revenue. Does that really reflect the fact that you're already getting better improvement on provisioning than you would expected maybe a quarter ago? And then maybe comment on what you said about the backlog, I think up 700 sequentially on the backlog, but also some of these may not be installed. So maybe talk about, as we look to the next few quarters, the rate of backlog growth we could expect and whether at any point you would expect to write down any of that backlog if you determine you can't provision it?

David Schaeffer

Founder, Chairman, CEO & President

Yes. So 3 different questions, Jim. Thanks for them. First of all, we substantially increased the number of endpoints that we could deliver wavelength services. We are quite confident that while we ended the quarter at 657 sites by year-end, that number will be over 800 sites. In order to provision a wavelength rapidly, all of the intermediate sites need to be optimized for that wavelength implementation. Our goal is to get those wavelength install windows down to about 2 weeks from today about 90 days. We had certain customers in our backlog that had significant needs for the wavelengths, and we diverted some resources away from the network optimization program to provision these wavelengths. We were comfortable enough in the progress that we had made to hit the total 800 sites and all of the intermediate points by year-end that we did not risk that pushing out. We continue to talk to the customers that are in our backlog. And if we can accelerate certain of those orders, we will. We also know that some of those orders have been sitting for months. We have tried to be very transparent with customers in terms of our limitations on hitting what we view as acceptable provisioning windows. Most customers have been tolerant of that and have continued to reaffirm to us that they are interested in those wavelengths. But it is also realistic that if some of those orders have been sitting for 6 or 7 months, when we actually go to provision and some customers may not accept those orders, and we'll have those discussions. Now with regard to the funnel building, we actually think the rate of funnel expansion should materially accelerate into next year. As we demonstrate success in delivering wavelengths, we then establish more credibility with those buyers. They see that we can, in fact, meet our provisioning windows. The quality of the service meets or exceeds industry standards and our pricing remains aggressive. So we feel very optimistic that in 2025, we will see a material ramp in the growth in our wavelength business to be able to hit our 5-year post-acquisition target of doing \$500 million in wavelength sales, which represents a market share of 25% in North America, similar to that of our market share for IP transit.

James Edward Schneider

Goldman Sachs Group, Inc., Research Division

And then maybe as a follow-up, I wanted to ask about the network cost side of things. I think you cited some individual items converting the Sprint sites and also some vendor termination costs. So on a goforward basis, maybe in Q4, as we head into a run rate for 2025, how should we be thinking about where those overall cost of revenues line, where does that settle out?

David Schaeffer

Founder, Chairman, CEO & President

So they will improve for 3 reasons. One, we continue to eliminate unprofitable products, whether they be low-margin off-net circuits or any noncore products that we can eliminate once the customer is out of contract for those services. Secondly, this quarter, we did have a substantial onetime expense associated

with buying out of a contract. That contract was complicated because it was not just a bilateral contract that we inherited, but it actually had 2 counterparties to it, and we had to get concurrence between those parties. While we can't disclose the exact settlement amount, it was substantially above the revenue that we were receiving and the cost that we incurred on a typical run rate basis. That is onetime and has gone. It was probably the largest and most complex of these cost of good contracts that we've quite honestly worked on for almost a year to get people to concur to allow us to exit it. While there are a few smaller contracts that will come up, they will be smaller, but some will show up definitely in 2025. And then the third item is as we have accelerated the marketing of our wholesale data center space, either for sale or lease. We have been conducting dozens of tours at dozens of locations with many counterparties. We have been getting significant feedback from those counterparties on what they want to see. Now sometimes we accept it, sometimes we don't. But it has resulted in us accelerating our conversion of these facilities. Just to remind investors, when we announced the Sprint transaction, our intention was to convert 45 facilities. That's been increased to 48. Secondly, we were only intending to convert about 10,000 square feet and about 1 megawatt into a retail Cogent data center and the remaining space and power was going to sit fallow. As the acceleration of AI training caused an acute shortage of data center power, we realized we had an incremental opportunity to monetize that excess power and space. We began last April talking to potential customers about that and listening feedback, conducting tours, and that did result in 2 things: an increase in capital spending that Tad mentioned, solely attributable to these data center conversions. And that was beyond the \$50 million in network excess CapEx that we had anticipated. Based on the amount of time necessary to complete these conversions, we will be at an elevated capital run rate for probably a couple of more quarters as we complete the conversion of these data centers. We believe we will have them all converted and fully operational and marketable with all of the excess power by midyear '25, so end of Q2. We also had to accelerate the deprovisioning and demo work in these facilities and that demo work cannot be capitalized. So therefore, it did increase our cost of goods sold. We expect that to start to come down this quarter and continue to come down for the next couple of quarters.

Operator

Our next question comes from the line of Greg Williams.

Gregory Bradford Williams

TD Cowen, Research Division

Dave, your on-net revenue was down quarter-over-quarter. You mentioned that, that contract that was terminated had that \$3.5 million impact, but it still would have been down \$2.8 million, excluding this. So just trying to understand the color here. And I think you mentioned the size and cadence of future uneconomic contracts going forward that will dribble into 2025. More color there would be great. And the same-store sales on corporate would be helpful. Second question is just on the data center sale process you just mentioned. Could they sell for less than the \$10 million per megawatt marker? But it sounds like you're putting the CapEx into it for the next few quarters so they can then command and fetch a \$10 million per megawatt price.

David Schaeffer

Founder, Chairman, CEO & President

Let me try to hit all 3 of those, Greg. So first of all, in the on-net revenue, there were 2 primary contributors to that decline. The first was a sequential decline of \$1.8 million in our commercial services agreement with T-Mobile. As we have been very clear that we are bound by our purchase agreement to deliver these services to T-Mobile. They are not particularly profitable and T-Mobile can, at its decision, continue to use them or not. We do anticipate them going asymethodically to 0, and they did come down \$1.8 million in the quarter. The second big impact, it was actually twice as big as the reduction in the commercial services agreement was the reduction of this contract. So we had a service that we were selling that had 2 counterparties to it that was resulting in a \$3.5 million revenue stream, but actually more than that in costs. We could not get out of that agreement until both counterparties would agree to a buyout provision, which we exercised in the quarter. I think we may have some smaller opportunities like this going forward, but this was the one that we've been working on. And quite honestly, it took us almost 18 months to get the 2 parties to agree. It wasn't something that we didn't know about. And it also was

impossible for us to predict when this would happen for investors just because we need a concurrence of both parties.

Thaddeus G. Weed

VP, CFO & Treasurer

If I could just add to the on-net. So this was in the prepared remarks. So the total impact of both of those transactions, the CSA and the customer contract was \$5.7 million on our on-net. So if you just adjusted for those 2 sequentially, we would have been up sequentially by 1% in the on-net line.

David Schaeffer

Founder, Chairman, CEO & President

Yes, absolutely, Tad. And then secondly, to your question about corporate, our core corporate products are continuing to perform at a reduced rate to where they were pre-pandemic, but still growing on a sequential and year-over-year basis. We are grooming 2 types of corporate revenue streams, the noncore services to corporate customers, and we are grooming low margin or even negative margin off-net services that we cannot bring on-net. That process will continue probably at a reduced rate, but probably for several more quarters because in many cases, we are contractually bound by contracts that we acquired in the acquisition to provide those services at a loss until such time as the contract ends. That is the primary reason T-Mobile paid us \$700 million. Now I'll pivot to your data center question. We looked at the price of data centers that have traded recently and we looked at what other wholesale operators were charging and establishing our go-to-market price points. We had no experience in this market. In fact, when we did the initial transaction, it was not an opportunity that we even contemplated. But as we sensed the acute need for this power in the marketplace, we began to start to convert those facilities. We felt that we were far enough along at the end of April to begin to allow counterparties to tour the facilities. We've even allowed investors to go on bus tours to some of the facilities and some research analysts have written on that. These are different than a brand-new purpose-built data center. They are a switch site that is being converted. While there are many things that we understood needed to be done, we have literally held dozens, maybe even hundreds of tours that we are gathering input from the customers. Sometimes the requests are unreasonable on things they want. Sometimes they are reasonable. We also have diverted more of our team resources and the use of contractors to get these facilities ready. That does require incremental capital and it does require incremental cost of goods sold and that we are doing this demolition work as a precondition that cannot be capitalized. We're primarily done with that. There's still a little bit more to be done, but there is a lot of preparatory work. Now I will say, among the counterparties, there's a great deal of divergence around what they want by site and by counterparty. We are trying to optimize to the highest return on capital. The amount of capital we are spending here is de minimis relative to the opportunity. So whether we get \$10 million, \$9 million or \$11 million a megawatt out of these sites, based on our basis, even with this capital, this will be a phenomenal outcome if we sell them. We also have, I would say, more counterparties interested in long-term leases than sales. We do have both, but the \$1 million a megawatt per year with CPI increases on a triple net basis has been viewed. I think, as an exceptional bargain in the market. We are continuing on a site-bysite basis to effectively have a quiet auction where we have multiple counterparties. And my guess is there will be some sites that we will get a premium to the ask. Some we get the ask and maybe some don't transact. It is a parallel effort to get the sites ready and to achieve the highest return for our shareholders.

Operator

Our next question comes from the line of David Barden.

David William Barden

BofA Securities, Research Division

I have two. The first is more of a housekeeping question, I guess, related to IPv4. And we've been seeing that IPv4 leasing volumes be growing at kind of like in the 5%, 6% range. You raised prices and now it's kind of growing at the 1% range. Could you talk a little bit about, Dave, your sense as to the price elasticity in that market right now?We've been looking at some of the brokerage sites and prices have been falling. And just interested in your updated view there. And then second, Dave, at the risk of having

you talk the rest of the call, I just wanted your latest thoughts. Lumen earlier this week basically made the case that the current physical Internet is too small, too slow and not secure enough for the emerging AI opportunity and that they're really in the sweet spot and that they're going to kill it in the AI world and that the puck is moving away from where the Cogents of the world are operating. If you could give me your retort to that, I'd love to hear it.

David Schaeffer

Founder, Chairman, CEO & President

Yes. Let me take the IP address space question first. So I think the demand remains robust. When we implemented a price increase, there was obviously some shock to customers that were in negotiations but had not signed contracts at the lower price. And there's just a bit of I think, adjustment that they need to get their head around in order to then pay the new price. I think most of that is behind us. I think you will see volumes continue to increase. Also on the provisioning of those addresses, there is sometimes a bit of a lag as we do the diligence on the counterparties to make sure they don't run a file of any security issues or foreign corrupt practices type issues. We have a dedicated team of 4 people that monitor the existing base of addresses and then vet new customers to make sure that they don't present a security threat. I think you'll see the volumes begin to reaccelerate. And by the way, the 11.8% sequential revenue growth is still pretty good and off of a decent base. We do have substantial inventory. In terms of sales, I think the market is bifurcated. For small block sales, prices have fallen. For large block sales, the prices have held very firm. And remember, Cogent possesses the largest block that has ever been given on a single basis. Now there are others, the size of our block. So I don't want to present that we're unique, but no one has more than we have in a single contiguous block. So I think we have a lot of leverage in terms of whether we want to sell them. But right now, we're pretty pleased with both the growth in volume and the growth that we're going to be able to achieve in pricing per address. So I don't think there's yet a demand elasticity problem. I'm going to pivot, and I promise to keep my answer short because I do want to get everybody else's questions answered on 2 things; the state of the public Internet and then the needs of AI or bandwidth. The public Internet has been predicted to die for 25 years. Every time there is growth, there is always some alternate technology that's going to replace the Internet, whether it's cross connects in data centers, peering fabrics, direct connections, CDNs and the Internet continues to grow. We grew traffic at an 8% sequential growth rate and a 19% year-over-year growth rate. That is hardly a technology that's in decline. AI is possible because of all of the data that has been collected over the Internet. Today, there is roughly 700 zettabytes of data that have been amassed from Internet collections, and that is actually now growing at the rate of about 165 zettabytes a year. So an acceleration in the collection and storage of data because it now has value for AI training. I think that trend is just beginning, and we're going to see continued acceleration. And these are third-party numbers. Cogent only has visibility to the transmission piece of it, not to the storage piece. And then to the point about the current infrastructure not being sufficient. There are thousands of strands of fiber sitting dark between every major metropolitan area and the developed world. We carry 1/4 of the Internet's traffic of one pair of fibers and are not fully exhausted the optical throughput of that pair of fibers, and we're still only utilizing about 29% of our lit capacity. It is true that certain training models do require defined latency and additional security. The fact that Cogent is selling wavelength services allows us to attack that market. There is a hierarchy of cost per bit mile. The cheapest, most efficient way to move bits is the Internet. The second most cost-effective way is a wavelength. The third most cost-effective way is to buy dark fiber. It's a premium service. And then finally, the absolute most expensive way to move a bit is build your own fiber. And there are companies engaged in those more expensive strategies. But I will disagree with the premise that the Internet has peaked and there's something else replacing it.

Operator

Our next question comes from the line of Walter Piecyk.

Walter Paul Piecyk

LightShed Partners, LLC

So on the CapEx, this is all basically speculative, meaning that you see the market in front of you, obviously, you're engaging with these discussions. You spend the CapEx now and then we start to see first

sales in the second half of next year? Or have these guys specifically contracted say, you do X, we're going to pay Y? Or have there already been sales that we can look at?

David Schaeffer

Founder, Chairman, CEO & President

So there have not been sales. We have letters of intent. We have multiple parties. We have not executed a letter of intent. We have gotten letters from buyers. We were not initially planning to even monetize this part of our acquired assets. If you go back and review the initial transcripts, we described a much wider data center footprint where we were going to use roughly 1/4 of the footprint and probably only a couple of percent of the power that was in these facilities. And we were going to sell our retail colo product, much like Cogent has and is continuing to sell. Based on inbounds initially and then our outbounds, we said we are sitting on an asset that today, because it exists, it doesn't have to be built, has real value, a time-to-market advantage. But we also knew we had to reconfigure these assets. That reconfiguration has 2 major components. One, just all of the demo work and preparatory work and then a modest amount of capital. We are confident enough based on the number of parties, the market and the overall price differential that we have that the modest amount of incremental capital we're going to spend over the next several quarters is going to give us a very high return.

Walter Paul Piecyk

LightShed Partners, LLC

I don't want you to spend more time reiterating what you already said. I appreciate that. I guess the question is, when you look at the data centers, it's like you spend the numbers so your CapEx is whatever it is, let's call it, \$60 million-ish for 3 quarters, then you hope to get sales in the second half. Does it then drop off? Or do you say like, let's say, you get a sale in June of '25, September '25, and then there's \$5 million more? Or do we have the \$60 million then dropping back down to a more reasonable level? And then tied to that, the capital lease payments, I know you had a onetime payment last quarter, but that's \$5 million, but I think there was like \$80 million for the year. But is \$5 million a new run rate in terms of capital lease? I'm just trying to get a sense of what else will contribute to cash burn? And does it basically end in June of next year? Or is there some continuation there?

David Schaeffer

Founder, Chairman, CEO & President

Yes. So to directly answer your data center question, one, I believe we will have transactions, whether they be leases or sales that are reportable before June. So you don't have to wait for June to a proof point. Now whether that's the entire portfolio, I doubt, but we will have proof points. Two, we will not have continuing CapEx related to the data centers beyond this initial conversion. So what we are spending is the money to convert 48 of the 482 acquired facilities. With regard to the capital lease payments, we did have a very meaningful prepayment last quarter. That was a onetime event. We do still have some incremental capital leases related to network reconfiguration. But we also will see some of the acquired fiber leases that we got when we acquired Sprint dropping off. And our total number of miles will actually go down and our expenses will go down.

Walter Paul Piecyk

LightShed Partners, LLC

So this run rate of \$5 million a quarter is probably the more reasonable number going forward on capital lease principal payments?

David Schaeffer

Founder, Chairman, CEO & President

Yes, it seems pretty reasonable.

Walter Paul Piecyk

LightShed Partners, LLC

So when we put all the pieces together then in terms of ramping wavelengths, Barden talked about the IP things, those volumes obviously dropped off, but you're getting price increases. How this all contributes to revenue, now this elevated CapEx, you're going to obviously have to increase debt if you continue to sustain the dividend. So I guess the question because it's just there is cash burn. I don't know how the math, especially with the TSA payment drop-offs that exist. So debt has to go up because your cash is going to drop below, I don't know what you think is comfortable in terms of working capital. So is there any reconsideration in terms of the growth in the dividend, just given that maybe the interest rate outlook today, obviously, these things change by the day, maybe not be as positive given some of the projected policies that are going to occur in future quarters. And by the way, also, your leverage is up a turn, you're probably headed higher just given how all these numbers work together before some of these sales and revenues kick in. Is it the right time to be adding additional debt to the balance sheet to fund the dividend?

David Schaeffer

Founder, Chairman, CEO & President

So we've had this discussion before, Walt, for 15 years, Cogent has more than 100% of cash flow as its EBITDA grew from 0 to \$352 million last year. You are correct that the arithmetic of the T-Mobile IP transit payments dropped off and it is an LTM test. So arithmetically, our leverage does go up. We have substantial access to additional capital. We have, for example, under the IPv4, ABS transaction, it's a trust. We have now increased the revenue into that trust by 50% run rate just since we initiated that would give us 50% of the borrowing capacity immediately. We are quite comfortable that we have multiple vectors of growth and ability to monetize and are very comfortable with our dividend policy as it has existed for the past 49 consecutive quarters and are comfortable in continuing a forward progression similar to what we've had historically.

Operator

Our next question comes from the line of Michael Rollins.

Michael Ian Rollins

Citigroup Inc., Research Division

A couple of questions. First one is if you look at the constant currency revenue change year-over-year, I think this is now the first comparable quarter where you have everything in there for 12 months and it's down 6.7%. And I apologize if you mentioned some of these numbers before, but can you share like on a year-over-year basis relative to that 6.7%, how much the heritage corporate is growing, how much the heritage NetCentric is growing? And then what the decline, the shrink is in all of these other things that you're managing through with the acquired revenue? And then secondly, just given how much noise you described was in the cost of goods or cost of service this quarter, what's the right run rate number that you get to in that cost of service to just appreciate cost on a more normalized basis?

David Schaeffer

Founder, Chairman, CEO & President

I can take the constant currency. So the impact year-over-year was negligible. It was only \$200,000 on total revenue.

Michael Ian Rollins

Citigroup Inc., Research Division

Sorry, I'm not asking about currency. I'm just using that as like the frame of if total revenue was down 6.7%, what did the heritage corporate grow at? What did the Heritage NetCentric grow at? And what did the acquired revenue shrink?

David Schaeffer

Founder, Chairman, CEO & President

Yes. So we basically had 3 buckets of intentional shrinkage. The first being the elimination of noncore services. And we're probably 3/4 of the way through those noncore services going away. We would have

Copyright © 2024 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

liked them all to go away day 1. Two, we've had low-margin off-net services that we are grooming. Those are continuing to be groomed, but we're probably, again, 50% of the way through what we can grow. Third, we had this extraordinary situation, and it was larger than any of the others, but there are some bad deals that we inherited after Sprint had been in business for 40 years that we are trying to unwind. In this particular case, we did take \$3.5 million quarterly sequential revenue hit from getting rid of that deal. And if we looked at the total acquired business of Sprint, it was in decline when we acquired it. Cogent was growing. The combined company is growing due to, as you phrased it, the heritage revenue streams. And let's parse those apart. There was no heritage enterprise revenue so there's nothing to talk about there. The current enterprise business, absent this one Tri-party termination actually grew sequentially, which is actually a little surprising to us. Some of that is because we've been able to implement some pricing discipline around the remaining services, and we've got better discipline as we've been selling new services. The core Cogent corporate business, absent these 2 reductions by design, that being low-margin off-net and noncore is growing at about a 4% annual growth rate. And that's off of now the included acquired Sprint corporate base for connectivity services. And then finally, on the NetCentric business, it is highly volatile. It's dependent on volume seasonality, but it is continuing to grow on a constant currency basis at around 10%. And while we saw a slowdown in traffic growth in Q2, in Q3, you saw a material reacceleration. And that is back to more historical patterns. But this goes back to Dave Barden's question, is the Internet peak and starting to decline? I can pretty comfortably say no.

Michael Ian Rollins

Citigroup Inc., Research Division

And on the cost of service, what's the right run rate level when you take out all of the noise that you described over the course of this call?

David Schaeffer

Founder, Chairman, CEO & President

It's probably more in line with what we did in Q2 and continuing to decline. But there is noise associated with terminating certain contracts. And the overall trend should allow us to grow EBITDA the previous quarter, almost all of the EBITDA growth came from COGS reductions in Q2. In Q3, they came more from SG&A reductions. And there is noise, but I think the COGS line should look more like it did in Q2 than in Q3. This was a very unusual set of cost of goods sold on this buyout. On the demo work, there is going to be some of that in Q4, but it should, I think, be substantially complete by then and therefore, won't show up in cost of goods sold. The monies that we do put into the wholesale data center space would exclusively hit CapEx at that point.

Michael Ian Rollins

Citigroup Inc., Research Division

And when you take a look at capital allocation in total, and you look at the possibilities for asset monetization that you mentioned during this call and in past calls, do you have a target dollar number by a certain target date, which is giving you some comfort in the way that you're going to manage the capital allocation over a multiyear period of time?

David Schaeffer

Founder, Chairman, CEO & President

So I think we have comfort in 2 dimensions, Mike. One, our ability to organically grow our EBITDA, absent the subsidy payment stream from T-Mobile and be able to grow that at a sufficient rate that we will be able to return more capital. We did buybacks in Q2 as well as dividends and do that even with a higher interest rate environment, as Walt pointed out. That may result in an equal or higher gross leverage, but a reduction in net leverage. And then we do see these 3 buckets of assets that will potentially be monetized. If I had to stack rank them today, I would say the data centers are the most probable, the IPv4 or the second most probable, and the dark fiber, the lowest probability just because we've had very little experience. We did one dark fiber sale in the quarter. It was actually to a customer as more of a favor than it was that we were trying to productize it. But we have had a fairly large number of inbounds around monetizing those, just as we had on the data centers. For me to have a specific date and a specific dollar

amount, I think there's just too many permutations to put that in front of investors. But I feel comfortable that we will get added benefit in delevering beyond growth in EBITDA from the monetization of these other assets.

Operator

Our next question comes from the line of Nick Del Deo.

Nicholas Ralph Del Deo

MoffettNathanson LLC

Dave, you said that the number of switch sites that you're planning to convert into data centers has increased. I think you gave a number earlier in the call. Can you split out how that breaks out between retail sites you're planning to hang on to versus larger locations that you're looking to sell or engage in a long-term lease with, both in terms of number of locations and the number of protected megawatts? I'm most interested in the sites you think you can sell or lease on a wholesale basis, which I think had been 88 protected megawatts across 21 facilities previously.

David Schaeffer

Founder, Chairman, CEO & President

And you are correct on both the megawatts and number of sites that we think are suitable for wholesale monetization that is 21 of the 48 total sites that we are converting to data centers. And it is 88 of the protected megawatts out of the 169 that we have today. And there are still a few more centers that have not yet even been converted to offer retail services. So the number of centers will go up probably by about 5 and the number of megawatts may go up by another 10 or so from where we're at today. But we only see 21 of them as good candidates. Now our view is that the market will tell us more than what we think. And if a particular counterparty comes by and says, we just need this facility in this location, we didn't think it was one that we would monetize through either wholesale or outright sale, everything is for sale at the end of the day.

Nicholas Ralph Del Deo

MoffettNathanson LLC

And I thought it was interesting that you noted there was more interest in long-term leases rather than outright sales for the larger facilities. If that plays out, would you then be inclined to sell the stabilized leased facilities, maybe the buyers looking for those sorts of income streams? I'm just thinking about whether Cogent would fetch an appropriate market multiple for that income stream, if it's buried into the rest of the business or if it's best to be held outside of the REIT structure?

David Schaeffer

Founder, Chairman, CEO & President

Yes. And the answer is we would evaluate that at that time. I think there might be an intermediate step if that, in fact, turns out the way that these facilities get monetized, which is you then do a specific securitization against that stream of revenue and unlock some liquidity and cash that way and then potentially sell that business with a portable capital structure and an ability for the new owner to get a higher valuation.

Nicholas Ralph Del Deo

MoffettNathanson LLC

And then last one, just thinking about the waves opportunity, you've talked quite a bit about a number of data centers you're going to have enabled and network work that you're undertaking to get things where you need them to be. Thinking about the other building blocks that go into being able to sell waves at the cadence that you want to achieve. Do you feel like the sales force is appropriately trained and ready to go when you decide to press the button? You have the test installations you've done been providing results consistent with the provisioning time frames you've laid out and so on? Just want to make sure that every building block of that business is settling into where it needs to be.

David Schaeffer

Founder, Chairman, CEO & President

Yes. And I think in looking at those building blocks, everything starts with the sales force. We have conducted multiple trainings and certification for the 279 NetCentric salespeople. Now not every one of them has sold a wave yet, but we've got a little over 1,000 waves sold, but it's not by 1 or 2 reps. It is fairly broad across the organization. We have developed online training manuals. We have our regional learning managers that do supplemental work, and we work with transponder vendors to hold teach-ins and tutorials. So the CRM system is today completely integrated with the Wave design tool. So the rep without engaging a sales engineer gets a map with 1 meter accuracy, latency down to 100 of a millisecond contractual accuracy. And we feel that we can generate contracts and deliver all the documentation quickly. The second piece is our service delivery organization. We have developed tools there. We have been able to provision waves in test cases, only a few because not all of the sites that were necessary for all of the waves could, but we have had some waves provisioned in a couple of weeks, which is our ultimate target. So we feel pretty comfortable that the service delivery process, toolkit and staffing should allow us to do that. The building block of the network is dependent on the endpoints and the intermediate points. We would not have diverted people to sell some dark fiber and to even install the waves we did in the quarter if we thought we jeopardize the goal of being fully wave-enabled across the entire 800 North American locations by quarter's end. So I feel that the network will be there, the service delivery team will be there and the sales team will be there to deliver it. But ultimately, what we have to do is build confidence with customers. And that's probably the most important of the building blocks and the way you do that, actually deliver what you say you're going to deliver without a problem and then the customer comes back. It's exactly how we built our credibility in IP, and it's how we're going to do it in the wavelength market.

Operator

Our next question comes from the line of Tim Horan.

Timothy Kelly Horan

Oppenheimer & Co. Inc., Research Division

I have three questions. Dave, there's a feeding frenzy for data center capacity at the moment, and it looks like a good chance we're running out of capacity in the next year or so. So what dictates the timing of you announcing a sale or a lease of the capacity? And do you have any customers that want to buy the whole portfolio at this point? And then secondly, I know you don't give much guidance, but can you give us a range of EBITDA margins for next year, given all the moving parts and maybe just update again, thinking in 5 years? And then lastly, can you just remind us, what was the timing that you increased the ITV for pricing and how much? And can you do so next year?

David Schaeffer

Founder, Chairman, CEO & President

So I'll take each of those questions. There are several counterparties who are interested in the entire portfolio. We are not certain that is the highest and best type of transaction to enter into. It may be. We're not initially contemplating this. You are correct. The market is continuing to tighten as there is more demand for power than can be met in a timely manner. Over time, there will be no power shortage, but that's a multiyear cycle. We have power available today. We've got to get these facilities ready. I think we hope sometime in the next couple of quarters, we'll be far enough along that we'll have deals that we can announce. But part of it's on us to get the work done. Part of it is on the market to pay us what we think is a fair price. In terms of EBITDA, we don't give quarterly guidance. So I want to be clear there. But we also understand that the rate of improvement in underlying EBITDA that we demonstrated over the last couple of quarters is a cadence that investors should expect. So our improvement in EBITDA as adjusted will lap the differential in payments from T-Mobile and therefore, will be on a more clean basis. So the \$25 million that we received in that IP transit payment this quarter will continue for the next 9 quarters. And then the underlying EBITDA should probably continue to improve at 200 to 300 basis points a quarter as we continue to achieve these cost savings. And then on the IPv4 pricing, it was a 2-step effort. The first step was raising prices early summer on the new sales. And then second, taking 25% of the installed

base and raising prices. We did that in September. We will also probably by year-end, go through and raise prices on another significant portion of the installed base. There is very little of that base that has contractual protections against our ability to do that. So I think there will be more growth in IP leasing revenue. The 11.8% sequential growth that we demonstrated this quarter, I think, is pretty significant and should continue. And going back to Walt's question, just gives us another tool if we choose to use ABS as a way to monetize it.

Timothy Kelly Horan

Oppenheimer & Co. Inc., Research Division

Just back to the data centers. If you got your asking price and someone wanted all of it and they wanted to customize it because obviously, if you do liquid cooling, things are going to look quite different than what you have right now or some other customization that they might want. Could we hear something sooner, maybe in the next couple of months instead of the next few quarters?

David Schaeffer

Founder, Chairman, CEO & President

So at least a couple of the counterparties we're talking to are planning liquid immersion and containment pods for their cooling needs. And it is one of the feedbacks that we have taken into consideration as we think about the highest and best value, and we're making sure that our HVAC systems can support that. In terms of timing, there's not a single facility today that someone could come in and stack servers and start training in. But there are a handful of the 21 facilities that are getting very close. You and Nick both had opportunities to go and tour some of these facilities, and you picked them at random. Both of you went to facilities I've never been to. I get pictures on a weekly basis. But I think they're fairly typical. And I think while there's a lot of potential, there is still work to be done in each of these facilities.

Operator

Seeing as there are no more questions in the queue, that concludes our question-and-answer session. I would now like to turn the call over to our Chairman and CEO, Mr. Dave Schaeffer, for closing remarks.

David Schaeffer

Founder, Chairman, CEO & President

Well, thank you all very much. I even got a compliment from Walt on shortening the script. So that's worth something. I want to thank everyone. Take care, and we'll talk soon. Thank you. Bye-bye.

Operator

The meeting has now concluded. Thank you all for joining, and have a pleasant day. You may now disconnect.

Copyright © 2024 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable. No content (including index data, ratings, credit-related analyses and data, research, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global Market Intelligence or its affiliates (collectively, S&P Global). The Content shall not be used for any unlawful or unauthorized purposes. S&P Global and any third-party providers, (collectively S&P Global Parties) do not guarantee the accuracy completeness, timeliness or availability of the Content. S&P Global Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON "AS IS" BASIS. S&P GLOBAL PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Global Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages. S&P Global Market Intelligence's opinions, quotes and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global Market Intelligence may provide index data. Direct investment in an index is not possible. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Global Market Intelligence assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global Market Intelligence does not act as a fiduciary or an investment advisor except where registered as such. S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the right to disseminate its opinions and analyses. S&P Global's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

© 2024 S&P Global Market Intelligence.