**Ciena Corporation**

**Fiscal Second Quarter 2019 Financial Results Conference Call**

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**Simon Leopold,** *Raymond James*

**Tejas Venkatesh,** *UBS Securities*

**Rod Hall,** *Goldman Sachs*

**Michael Genovese,** *MKM Partners*

**Samik Chatterjee,** *JP Morgan*

**Jeff Kvaal,** *Nomura Securities*

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**Jim Suva,** *Citi*

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## PRESENTATION

**Operator:**

Good morning, my name is Lisa and I'll be your conference Operator today. At this time, I would like to welcome everyone to the Ciena Fiscal Second Quarter 2019 Financial Results Conference Call. All lines have been placed on mute to prevent any background noise. After the speakers' remarks, there will be a question and answer session. If you would like to ask a question during this time, simply press star, then the number one on your telephone keypad. If you would like to withdraw your question, press the pound key. Thank you.

Gregg Lampf, Vice President of Investor Relations, you may begin your conference.

**Gregg Lampf:**

Thank you, Lisa. Good morning, and welcome to Ciena's 2019 Fiscal Second Quarter Review. With me today is Gary Smith, President and CEO, and Jim Moylan, CFO. Scott McFeely, our Senior Vice President of Global Products and Services, will join us for the Q&A portion of today's call.

In addition to this call and the press release, we have posted to the Investor section of our website an accompanying Investor Presentation that reflects this discussion, as well as certain highlighted items from the quarter.

Our comments today speak to our current view of the market environment and our industry position, our fiscal second quarter financial performance, as well as our guidance for the fiscal third quarter and an update to our revenue outlook for fiscal '19.

Before turning the call over to Gary, I'll remind you that during this call we will be making certain forward-looking statements. Such statements, including our guidance and any commentary about our long-term financial targets, are based on current expectations, forecasts and assumptions regarding the Company and its markets, that include risks and uncertainties that could cause actual results to differ materially from the statements discussed today. These statements should be viewed in the context of the risk factors detailed in our most recent 10-Q filing and in our upcoming 10-Q filing, which is required to be filed with the SEC by June 13, and we expect to file by that date.

Today's discussion also includes certain adjusted or non-GAAP measures of Ciena's results of operations. A detailed reconciliation of these non-GAAP measures to our GAAP results is included in today's press release.

Ciena assumes no obligation to update the information discussed in this conference call, whether as a result of new information, future events, or otherwise.

With that, I'll turn the call over to Gary.

**Gary Smith:**

Thanks, Gregg, and good morning, everyone. Today, we reported a very strong quarter across all of our financial and performance metrics. This included revenue growth in all major product segments and customer verticals. This reflects our balanced growth and continued market share gains. Order flow significantly exceeded revenue in the quarter, giving us strong visibility and increased confidence across our business.

This performance is driven by the combination of our outstanding execution of a very deliberate and long-term strategy, as well as favorable competitive dynamics. Specifically, we consistently achieve technology leadership across our portfolio and continue to build a diversified customer base in high-growth markets, all at global scale and with deep customer relationships. As a result, we continue to outpace the competition across multiple dimensions, and we believe that we represent the strongest and most stable partner to customers around the world. This combination, in turn, is driving consistent and differentiated financial performance, including better than expected performance in Q2, and is enabling us to significantly increase our revenue outlook for the remainder of the year.

Over the past few years, there have been several notable shifts happening in the communications industry, including evolutions in network design and technology, as well as changes to the profiles of the customer base and the competitive landscape. Our Q2 results illustrate the very positive impact on our business of how these shifts are playing out today for Ciena. Specifically, demand for capacity in its various forms remains robust across our customer segments, geographies and market verticals, and we are intensely focused on executing and delivering on this robust demand. Also, the industry structure continues to currently be defined, really, by a flight to quality, where customers are more intently seeking out vendors who offer leading innovation and engagement models, and who have the financial strength and sustainability to deliver on these over the long term.

Other industry dynamics also continue to occur, but with perhaps less of an effect overall on our business. In particular, customers in certain geographic markets continue to evaluate rebalancing their network spend in the face of an overdependence on certain Chinese equipment vendors. Although the benefit of this to our business directly is difficult to discern, it has been a dynamic that has been in place for some time, and we believe it to be relatively minimal impact on our business at this stage.

As we have said consistently, in addition to these favourable industry dynamics, it is also the strong execution of our strategy to deliver the industry's leading innovation, while diversifying our business and leveraging our global scale, that is underpinning our success.

With respect to innovation leadership, our competitive position continues to strengthen, particularly given our focused investments in Optical Packets and Blue Planet automation software, and our strong financial results are a direct reflection of the fact that the market firmly believes Ciena has the strongest offering today and the most credible roadmap for the foreseeable future. Our current portfolio, as well as our roadmap, including feature sets and the timing of market introductions, are, frankly, unmatched in the industry today.

As we head into the second half of the year, demand for WaveLogic Ai continues to grow, and we will further extend that Optical leadership with our WaveLogic 5 program, which remains on track to deliver single wavelength 800-gig systems later this year. Just as importantly, this innovation and time to market leadership is enabled by our significant investment capacity, which ensures that we have the depth and flexibility in our development to remain ahead of the competition.

Moving to diversification, Q2, frankly, was yet another great illustration of the breadth of our customer base and the benefit it provides to our business. We had a strong showing from North American Tier 1 service providers, web-scale players, and in Asia-Pacific, specifically Japan. With North American service providers, we continue to benefit from their spending on densification initiatives, metro, access and aggregation build-outs, and ongoing longhaul investments. In Q2, both of our 10% customers were North American Tier 1 service providers. The breadth of our web-scale business is expanding and our relationships with these customers are deepening. This is driving differentiated growth and continued share gains in this important vertical. Once again in Q2, three of our top 10 customers were web-scale companies, including one that was just a fraction under 10% of total revenue. We are also accelerating share capture and landing new wins with service providers globally, including in Asia-Pacific, beyond India. We expect these three customer groupings to be among the significant drivers of our business in the second half of fiscal 2019.

Finally, with respect to the market advantage we have with our global scale, because of how we've strategically grown our business around the world, including within key customer segments and with well resourced and focused innovation agenda aligned to their priorities, we essentially have strong exposure to higher growth markets. That, combined with our world-class go-to-market organization, including the largest Optical Sales Team in the industry, positions us to foster the deepest and broadest customer relationships that exceed those of any other vendor.

In summary, it is the confluence and continued execution of these multiple elements, together with favorable industry dynamics, that are enabling us to deliver outstanding financial performance and continued share gains.

With that, I'll ask Jim to take us through the Q2 results and our higher outlook for the rest of the year. Jim?

**James Moylan Jr.:**

Thanks, Gary. Good morning, everyone. We delivered a very strong top line performance in Q2, with revenue of $865 million, representing 18% growth year-over-year. Some highlights in our Q2 revenue include: Packet revenue of $73 million, up 15% from Q2 of last year; Blue Planet automation software services revenue of $12.4 million, keeping us on track to achieve our fiscal '19 target of $50 million to $60 million.

With respect to Q2 revenue across customer verticals, non-telco revenue was $295 million, up 17% year-over-year; direct web-scale revenue contributed revenue of $167 million, up 31% year-over-year; and subsea revenue was $63 million, up 23% year-over-year.

Moving to gross margin, our Q2 adjusted gross margin was 43.9%, above our estimated range, due to higher cost reductions than expected and a confluence of favorable mix factors.

Q2 adjusted operating expense was $269.7 million, above our guidance range. The increase in operating expense was related to the timing of certain R&D projects, as well as slightly higher variable compensation given the strong quarterly performance. Year to date, we are essentially on plan for opex, except for the higher compensation expense just mentioned.

With respect to profitability measures in the second quarter, we delivered adjusted operating margin of 12.7%, adjusted net income of $76.2 million, and adjusted EPS of $0.48. In addition, in Q2, our Adjusted EBITDA was $131 million and cash from operations was $104 million. We ended the quarter with approximately $818 million in cash and investments.

Finally, we continue to execute on our share repurchase plans. During the second quarter, we repurchased approximately 1.2 million for $45 million. We are on target to buy back approximately $150 million in share value by the end of our fiscal year.

Before I move on to guidance, I want to comment briefly on two current geopolitical matters impacting markets in general and, potentially, our industry.

First, regarding U.S./China trade tensions and overall relations, we have not seen any substantive impact on our business to date. While there are many elements to this situation, given the global nature of supply chains, it is important to note that, unlike many others in our industry, we have almost no revenue exposure to China.

Second, regarding the potential for tariffs on imports to the U.S. from Mexico, the situation is late-breaking, it's very fluid, and we can't be sure what, if anything, will ultimately be put in place and for how long. For now, we are evaluating a range of alternatives and mitigation strategies to address the potential effects on our manufacturing and distribution operations in Mexico. If the initial 5% tariff is put in place next week, as proposed, our preliminary analysis, which reflect several conservative assumptions around our ability to mitigate, indicates that it could impact our Q3 gross margin by as much as 1%. I emphasize that this is a preliminary and very conservative number.

The situations with China and Mexico are highly uncertain at the moment and we will continue to monitor them carefully. Importantly, for you, we have not factored into our outlook today any significant potential effects of either of these matters and we do not believe they will fundamentally alter our competitive position or the benefits yielded by our innovation leadership, diversification and global scale.

Looking ahead, in fiscal third quarter 2019, we expect to deliver revenue in a range of $915 million to $945 million and adjusted gross margin in the 42% to 43% range. Given our strong results in the first half of fiscal ’19, and our projections for the second half of the year, we are in a position to increase our revenue guidance for the full fiscal year. Specifically, we now expect to achieve annual revenue growth this year in the range of 13% to 14%.

As I said before, we are on plan for opex year to date, except for some variable compensation expense booked in Q2, and we expect to be essentially on plan for the rest of the year, except for the potential for higher compensation expense if we perform to our revised expectations. With our new guide, we anticipate incurring higher compensation-related expense of approximately $10 million per quarter in the second half of the year. With that, we expect operating expense in the third quarter to be approximately $270 million.

In closing, we posted a very strong set of results today for our fiscal second quarter, including continued market share gains in every vertical. In addition, our strong visibility gives us increased confidence for the fiscal year, reflected in our higher revenue outlook for 2019. In a market that continues to grow in the low to mid-single digits range, continued execution of our strategy and a strong set of industry dynamics are positively influencing our business and enabling us to advance our competitive position.

With that, Lisa, we’ll now take questions from the sell-side analysts.

**Operator:**

Thank you. At this time, I would like to remind everyone, in order to ask a question, press star and the number one on your telephone keypad. We’ll pause for just a moment to compile the Q&A roster.

Our first question comes from the line of Paul Silverstein from Cowen. Your line is open.

**Paul Silverstein:**

Good morning, guys. Jim, first, a clarification. I assume your 42% to 43% gross margin guidance, that incorporates the potential for that 1% adverse impact; is that correct?

**James Moylan Jr.:**

No, it does not. No, 42% to 43% is our range of gross margin that we believe we’ll see for the third quarter, and the rest of the year, for that matter.

**Paul Silverstein:**

So, if the Mexicans, the 5% proposed tariff is put in place, that would have an additional one percentage point effect, just to be clear?

**James Moylan Jr.:**

Yes.

**Paul Silverstein:**

All right.

**James Moylan Jr.:**

I'd emphasize that's a very conservative number.

**Paul Silverstein:**

All right, and now for the question. Gary, it sounds like you've had a pretty decent sea-change in your outlook for the web-scale folks. Ninety days ago, you were talking about web-scale customers being soft in the second half of the year. Based on the growth you just put up, and I think as Gary commented, that you're expecting a strong second half of the year out of that group. Obviously, we're all aware in the investment community of your peers that have cited issues of one stripe or another. Can we revisit that and give us some insight what's going on there? Then, one related question. On the 600-gig versus 800-gig concern, that you've now got competitors shifting 600-gig-based platforms, and the rest to Ciena, it doesn't sound like that's having an impact, either. If you could address those two issues.

**James Moylan Jr.:**

Let me start, Paul. Just to be clear, we never spoke of weakness with respect to the web-scale. We said that we were going to have a good year with web-scale, but that we were not going to grow for this year as much as we grew last year. Remember, we grew 140%, or something, in that vertical last year. We said we were going to have a good year and we were going to grow. All of the comments about weakness in our web-scale business came from other places, not from us. I'll now let Gary address the other questions.

**Gary Smith:**

Yes. So, specifically, we still think the web-scale market is growing in the single to low double-digits, and we're going to grow above that market rate. Basically, we're going to continue to take share, and that's driven by two elements: one, the technology and innovation leadership that's appreciated there, and the embedded relationships that we have with them, as well. But, I want to be clear. The growth that we're talking about in the second half is multi-faceted, it is not just web-scale. We're doing very well in web-scale and we have good visibility to that, but service provider business in North America, very strong, the wins that we've had with global Tier 1s, they're also beginning to play through; specifically, markets like Japan, very strong. It is a balanced growth strategy that we've been pursuing and we're seeing the benefits of that in our broad-based projections, that, frankly, are going to be better than we anticipated going in, based on those set of dynamics.

Scott, do you want to talk about the 600-gig?

**Scott McFeely:**

Paul, it's Scott. In terms of the competitive dynamics, I'd say this. In Q2, we had a record quarter in terms of demand and shipment for our existing WaveLogic product portfolio. As we look in the second half of the year, that is accelerating off of that record height. That's a window into the competitive dynamics, if you like. If you couple that with our announcements around WaveLogic 5 and the market-leading innovation that that brings, and the fact that we're well on the execution path of that, as we thought we would be when we made the announcement, we're very comfortable in terms of our competitive position, but more importantly, I think, if you look at the second half guidance we have here, that's backed up with great visibility and demand across that portfolio.

**Paul Silverstein:**

Scott, can I just ask you to clarify on the web-scale and the positive growth, speaking loosely, plus the flattening that you previously referenced relative to the explosive growth that you enjoyed, can you give us insight as to what you're expecting in terms of growth from that customer base in the second half of the year?

**James Moylan Jr.:**

We were up 31% for the quarter. I'm not going to comment on the growth rate. It's going to be good this year, but it's not going to be 140%. It'll be strong, we're going to take share.

**Scott McFeely:**

What we've said in the past, Paul, I think, is that the spend in our space of the web-scale players do, our perspective was that that was growing year-on-year, high single-digits, low double-digits. We haven't changed that perspective. If you look at our growth rates that Jim referenced, it's clear that we're taking share in that space.

**Paul Silverstein:**

I appreciate it, thank you.

**Gary Smith:**

Thanks, Paul.

**Operator:**

Our next question comes from the line of Simon Leopold from Raymond James. Your line is open.

**Simon Leopold:**

Great. Thank you very much for taking the question. It seems as if you're putting a lot of emphasis on sort of the non-telco, but I'm hoping maybe you could double-click on the majority of the business, the telco, and maybe give us a little bit more detail as to the sources of the upside surprise in the quarter. Specifically, I'm trying to get a better sense of whether this is your traditional North American customers or whether this is evidence of the increased traction in Japan, you did highlight that, but I imagine India is declining and Japan is growing. So, if you could help us understand the really the sources of the strength versus your guidance. Thanks.

**Gary Smith:**

I would sort of start with answering this around the overall, what I would call the flight to quality that you're seeing amongst the global service providers, and that is multi-dimensional, it's around innovation, the technology, the relationships, the scale and the sustainability. I think there's a lot of concern around the global service providers, the big Tier 1s, around the sustainability of many competitors, and also the technology and the ability to sustain that roadmap. I think, overall, you're seeing those dynamics very favorable towards Ciena. I think that's the sort of macro-market dynamic. It's not brand new. We think it's accelerating, though, this year, and is showing up in our results.

In terms of the geographic elements to that, North America, we had a very strong quarter and order flows, and we have a good strong forecast for the remainder of the year. That's with the big Tier 1 service providers. Cable, I would say is stable, I think probably be a little bit of growth for us this year, with new logo wins we've had in that space. Internationally, we grew most of the regions, EMEA was up for the year. Asia-Pacific is seeing good growth. India, given the election and the rest of it, will be, I think, sort of flat for the year, but I think it talks to our broad-based growth strategy. We've got other markets that are picking up the load. Japan, in particular, very strong growth out of Japan, and, again, I think that also is about the flight to quality and the concerns around the longevity of their indigenous vendors, as well, and we're well placed to take advantage of that.

Simon, that's how I'd summarize it. It's very broadly based. We're also getting some of the benefits of the Tier 1 wins that we've had over the last 18 months now beginning to come to revenue, and that gives us good visibility into the second half of the year with the service providers. We feel very good about service provider business in 2019.

**Simon Leopold:**

What would you consider the single biggest surprise for you in terms of these results?

**Gary Smith:**

I think, really, the advancement of the competitive position—Scott talked to this—and I think the desire for WaveLogic in its various forms, I think has been extremely robust. We expected it to be good for the year, but I think it does talk to the competitive position that we have.

**Simon Leopold:**

Great. Well, thank you very much for taking the question.

**Gary Smith:**

Thanks, Simon.

**Operator:**

Our next question comes from the line of Tejas Venkatesch from UBS Securities. Your line is open.

**Tejas Venkatesh:**

Thank you. I have another question on the sources of strength. If I have my math right, it looks like your North America revenue, outside of direct web-scale, AT&T and Verizon, grew about $25 million year-over-year, particularly strong, so I'm curious if you could comment a bit on that.

**James Moylan Jr.:**

Yes, I'd say that we're doing well with a whole set of customers, in addition to AT&T and Verizon. We're in the enterprise market, we had a good enterprise result for the quarter and for the half. The smaller Tier 1s and Tier 2s, we're doing well in. It's very broad-based, Tejas. We're doing very well. And government, excuse me.

**Tejas Venkatesh:**

Got it, thank you. Then, would you comment on your AT&T expectations for this year and what that could look like versus historical patterns?

**James Moylan Jr.:**

As we said at the beginning of the year, we expect a year of growth out of AT&T. We've been sort of flattish to down in AT&T for several years. That had more to do with their spend on Optical than, certainly, any loss of share on our part. We expect a good year out of AT&T. They're buying—they buy pretty much everything off the truck.

**Tejas Venkatesh:**

Thank you.

**Gary Smith:**

Thank you.

**Operator:**

Our next question comes from the line of Rod Hall from Goldman Sachs. Your line is open.

**Rod Hall:**

Yes, hi, guys, and thanks for the question. Nice job on the execution here. I guess I wanted to start with the WaveLogic 5 product and just ask if you guys are still on track to deliver that by the end of the year, and then more importantly, are you expecting to ship it in volume, at least on the Waveserver and the 6500 platforms, in the March quarter. That's the first question.

The second thing I wanted to ask about was opex, just to clarify your comments there. The R&D numbers, I'm assuming that what you mean, Jim, when you talk about the R&D, is that you should still see that growing slower than revenue, but I just want to be sure about that, and then maybe one follow-up to this, as well.

**James Moylan Jr.:**

I'll address the opex piece first and then Scott or Gary will talk to your revenue question. On opex, the timing of R&D spend can be somewhat volatile quarter to quarter, because we do projects, we do NRE (phon), we do lots of things which happen during a quarter and can either inflate or deflate the opex number. The important thing to note is we gave guidance at the beginning of the year that we were going to be running opex between $255 million to $260 million a quarter, we're on track for that. We will spend a bit more on compensation expense for this year if we deliver the guidance that we gave you.

**Scott McFeely:**

Rod, on the question of WaveLogic 5, the short answer is yes. We announced it to the marketplace back in calendar Q1. We said it would be available at the end of the year and we'd be shipping on Waveserver products and 6500 products in volume in calendar Q1 next year, and that's all on track. The execution of the program has been bang-on from our expectations.

**Rod Hall:**

Could you guys, just on the WaveLogic 5, could you just talk about—maybe give us a little bit of color on what you're hearing back, particularly from the DPI market on that. The fact that it's a 600-gig versus 800-gig question, it just seems like if that's available in volume, it's hard to believe that, you know, people wouldn't pretty rapidly shift over to that technology, but I don't know, maybe the price per byte is going to be significantly higher and that would keep people buying 600-gigs, but just a little bit of color maybe on how you see competitive dynamics there developing, particularly in DPI, early next year, as you start shipping that in volume.

**Scott McFeely:**

Yes, I'd say it this way, Rod. The 800-gig versus the 600-gig is the tagline for the comparison, but it's really performance at every application in the network, and if you look at the specs on WaveLogic 5, it outperforms anything that is advertised from the competition now or in the foreseeable future at every application space. We have execution in front of us, no question, we've got a great track record of doing that, and we're confident about that, but we're very, very confident in terms of the competitive spec on that.

By the way, as I said in the past, we deal with a very sophisticated set of buyers and they buy not only existing stuff on the roadmap, but they're also buying the roadmap, and they're very aware. When we say we've got very robust demand in the second half of the year for our capability set, it's partially with visibility to those roadmaps, as well.

**Rod Hall:**

Could you guys also—this will be my last one, but could you just comment on the North America trends? I know you've already said a few things, but we were surprised to see year-over-year growth there accelerating so much in April, and just wondering whether, you know, do you think that is a particularly good quarter as you look out the next couple quarters, or do you think that North America, because of the project visibility, you guys are going to continue to be as strong or stronger than what you saw in April?

**Gary Smith:**

The answer to your question is yes. We continue to expect North America to be strong, both in terms of existing relationships and our strong visibility into that, the order backlog, some of the new wins that we've had. There's a couple of Tier 1s, as well, that are now—that have a got a fair amount of publicity, that will now be ramping up in the second half. So, we've got a very high degree of confidence in a strong North America, and I think, Rod, it talks again to not necessarily, you know, whether their total capex increases or not, it's who they spend it with, and I think they're being way more discerning around their desire to have a sustainable player in there than ever they have been before.

**Rod Hall:**

Okay, thanks, guys. Thanks, Gary, appreciate it.

**Gary Smith:**

Thank you.

**Operator:**

Our next question comes from the line of Michael Genovese from MKM Partners. Your line is open.

**Michael Genovese:**

Great, thanks. Could you help us understand how you beat the second quarter gross margins by as much as you did? Software was not particularly strong and Packet was sort of in line. So, what was the dynamic there behind those GMs?

**James Moylan Jr.:**

Yes, Mike, as we've said before, gross margin is difficult for us to call within a very narrow band, because there are a lot of things that impact gross margin in a given quarter, customer mix, early stage of projects, specific projects which have good margins or less than good margins. What I'd say, generally speaking, you'll note that services had a higher gross margin in Q2 than Q1, and that had some sort of unusual things in both quarters which accentuated the differences, and then, generally, a favorable mix and cost reductions. So, that's what I can tell you. I still think we're a 42% to 43% gross margin company today, as we said. I think we're going to go up from that range next year, but I think we're 42% to 43%.

**Michael Genovese:**

I want to follow upon that, because it sounds like 42%, 43% is conservative, but it would be even more conservative to assume that these Mexican tariffs go into effect this quarter, but you're not assuming that, so I'm trying to sort of understand what you're saying about 42% to 43%. It kind of sounds to me like you're saying you could be at 42% even with a partial quarter of Mexican tariffs. Is that fair?

**James Moylan Jr.:**

I'm saying that 42% to 43% is our base gross margin, and then we said the estimate, conservative estimate of what Mexican tariffs being in place for Q3 could impact our margin by 1%. Now, there's a hundred assumptions based into that, that we haven't tested. We're going to do a lot of work on mitigating that effect, if they come into place. So, that's what I'd say. Our base gross margin is 42% to 43%, we believe.

**Michael Genovese:**

Thanks, Jim and Gary. Guys, keep up the great work.

**Gary Smith:**

Thanks, Mike.

**Operator:**

Our next question comes from the line of Samik Chatterjee from JP Morgan. Your line is open.

**Samik Chatterjee:**

Hi, good morning, and thanks for taking the question. I just want to start off with the tariff topic itself. There is probably a proposal, as well, that the 5% tariff goes to 25% in October, I believe. If that were to happen, what are the alternatives in terms of footprint that you can evaluate over the short term to mitigate that impact?

**James Moylan Jr.:**

You can imagine that we are looking at all the alternatives if the tariffs are put in place at all, because we'd like for there to be no effect on our results even if the tariffs are put in place. That does include things like moving manufacturing, changing some flows out of our supply chain, and other things that we would do. But, beyond Q3, it's very, very difficult to predict what's going to happen to these tariffs, but I can assure you we're going to do the right thing. We've gone through things like this before and we've always been able to mitigate potential effects. That's why when I give a number like about 1%, we're giving you a conservative number before we put in place the things that we will do, if necessary.

**Samik Chatterjee:**

Okay, got it, and can I just follow up on—related to the EMEA customers and their overdependence on a Chinese supplier. You mentioned it's not a material impact right now on the business. I just want to see if you have any comments particularly on win rates in Europe and if you've seen an acceleration there in the win rates this year.

**Gary Smith:**

I think, you know, a couple of comments that I would have on it, Samik. Whilst this is getting a lot of publicity, obviously, right now, this is a dynamic, frankly, that has been in play for a couple of years, and I think it's driven by a number of elements, not least of which is just the large market share that these Chinese vendors have taken within certain customers, and customers are very aware of that, very sensitive to it, and are looking to decrease their dependency. We began to see some of these dynamics come into play about two years ago. Difficult to discern exactly which customers, which revenue, etc., but I think it has been a factor over a period of time here. I also think it plays into this overall sort of, you know, flight to quality piece that I talked about earlier. It's difficult to discern exactly what the impact has been to us, but definitely there is a concern amongst a number of large carriers, particularly in Europe, but they just actually have an overdependence on Chinese vendors and they're looking to mitigate that over time.

**James Moylan Jr.:**

Just to be clear, there's another element to this whole U.S./China situation, which is prohibition on American component makers selling into Chinese vendors, which would be a serious problem. There's security concerns that the U.S. is talking with companies around the world about. But, it's that element, this sort of set of security concerns and trade concerns, for which we've seen no real effect on our revenue. Where we've seen effect on our revenue is the high market share that Huawei holds in certain markets. We have no way of knowing how the first thing that I was talking about will affect our future.

**Samik Chatterjee:**

Thank you, thanks for the color.

**Gary Smith:**

Thanks, Samik.

**Operator:**

Our next question comes from the line of Jeff Kvaal from Nomura. Your line is open.

**Jeff Kvaal:**

Yes, I have a question and a clarification. I think on the question, would you all mind helping us through how sticky the Huawei gear proves to be, or just in general, how long is the process of switching from any vendor to another and how would be able to gauge that impact on your revenues, like over what timeframe? Then, I guess the clarification is, Jim, your 1% impact from Mexico tariffs for half a quarter at a 5% rate, would that apply—does that essentially mean 2% for a full quarter? Is that the implication there? Thank you.

**James Moylan Jr.:**

I think we're giving you a conservative number for Q3 because it's topical. I'm just not prepared to give you much more than that today, Jeff. Our base gross margin excludes any of that impact.

On the Huawei question, Scott, do you want to address that?

**Scott McFeely:**

Yes, I think there's—it's a tough one to give you a black-and-white answer to, because each of our customer bases has different new product introduction processes that take anywhere from, you know, in some cases a relatively short of period of time and in other cases a year, a very expanded period of time, so it's difficult to give you a here's-the-model perspective, and there are also different approaches in terms of how they may go about this, totally overbuild a network, run form wavelengths over existing systems, and those also drive a lot of variability to the answer of that question. So, it's difficult to give you a black-and-white one.

**Jeff Kvaal:**

Well, if one is speaking about a telco, in general, these decisions are made over many years in some cases, and they did all, obviously, welcome Huawei into their networks at some point in the past. It sounds like it's a slow process, if they wanted to switch share back and forth, but I'm trying to gauge your commentary on that with just a shade more visibility or detail.

**Gary Smith:**

Jeff, maybe I can sort of give a bit more color to it. I alluded to it when I said this has been going on for many years. This is sort of a two- to thee-year thing that we've seen. We've had wins, particularly in Europe and certain parts of Asia, that I can probably point to and say that's because of the concern about their dependency on a particular vendor. So, we have seen that. The most public one that I would offer you is Deutsche Telekom, who has been a very big Huawei customer and has not been a Ciena customer, and last year we won both the international and the domestic business with them, and we're just beginning to roll that out right now. So, to your point, that has taken about a year or so, in terms of the back office integration, etc., but that's one example that I can give you we've talked about publicly of that kind of a shift.

**Jeff Kvaal:**

Okay, thank you all very much.

**Gary Smith:**

Thanks, Jeff.

**Operator:**

Our next question comes from the line of Alex Henderson from Needham. Your line is open.

**Alex Henderson:**

Thank you very much. You guys are clearly having what I would describe as halcyon days, with three quarters in a row averaging about 20% revenue growth. I don't think you've seen those kind of conditions for a very long extended period of time. Within the backdrop, you've got the Japanese Olympics and displacement of the Japanese vendors, you've got strength at AT&T and Verizon, you've got a number of positive tailwinds all kicking in to give you growth way above historical trend lines. I guess my question is to what extent do you think some of those start to reverse against the tougher comparisons as we get past the next couple of quarters and we're looking at tough comps. Your growth rate for the three-year period is 6% to 8%. How should we think about—you know, is this so far above trend line that it starts to revert back to it, or is there so much pipeline built, because of the things you've just talked about in terms of share gains versus Huawei, and other weakened competitors, that this continues? If you could put some thoughts into around 5G into that, I would appreciate it.

**James Moylan Jr.:**

You must be referring to beyond this year, because we've given guidance for this year. Just for some context to that, we're in a market which is growing, we believe, low to single-digits—low to mid-single-digits, I should say. That's been the case for the last eight or nine years. In that context, we have grown two to three points above that range, and we've taken about a point of share per year, until the last couple of years, when, as we've said, we've had a confluence of factors which are really driving our growth rate up beyond what we think we can sustain. So, our believe is, beyond this year, we will revert to 6% to 8%. Now, that will be off a much higher base, so our numbers are going to be higher, and your numbers should be higher. I'd also say that our EPS growth, we think we can continue at 20% a year, although, if you just run our guidance out, and if we achieve it, we're going to be above 20% EPS growth rate this year.

**Alex Henderson:**

One more question, if I could, again longer term. Clearly, 800-gig is going to be a big cycle. The 400 to 800 is a nice round, you know, feed into it, so that always helps the dynamics. As we start getting past 800-gig, are we moving away from an environment where, over the last decade plus, virtually everything has been driven by the DSP, whereas going forward, in order to push higher (inaudible) rate, it starts to become more important, Indian phosphate, and are at all concerned about the health of that supply chain?

**Scott McFeely:**

This is Scott, I'll take that one. First of all, to your question about the DSP, we still think there is performance we can eke out beyond what we've announced in terms of the next generation, so there's still work to be done there, but you're quite right. The innovation on the whole coherent drivetrain doesn't just include the DSP, and one of the reasons why we actually went out and acquired TeraXion a couple years ago was actually to get control over the intellectual property and the execution capability around the electro-optics piece of that drivetrain, including Indian phosphate, but also silicon photonics. As I say, we have control over our own destiny in that, in that place, and that is actually what has allowed us to be extremely aggressive in terms of the innovation cycle that we're putting on the table for WaveLogic 5.

**Alex Henderson:**

Thank you very much.

**Gary Smith:**

Thanks, Alex.

**Operator:**

Our next question comes from the line of Jim Suva from Citi. Your line is open.

**Jim Suva:**

Thanks. A pretty basic question. Given the pending Mexico import tariffs, have you seen an acceleration or pull-in orders thus far?

**Gary Smith:**

I think the quick answer to that is no, we haven't. It's a very fluid situation, but no, we have not seen any forward ordering based on that, I think, given the uncertainty of it.

**Jim Suva:**

Okay, great, and then …

**James Moylan Jr.:**

It's early days, for sure.

**Jim Suva:**

Okay, and then my last question is kind of a bit of an accounting question. In the past, you've had some restructuring costs, and it looks like they went up this quarter to about $4 million, versus the past few quarters kind of lower, and the line item, passive impairments and write-offs or impairments, but is that more on the restructuring side, what's gone into there? Why would it go up when you're having revenues and earnings and profitability going up? I would expect that it would actually be going in the other direction.

**James Moylan Jr.:**

The answer to that is that—we talked about this earlier in the year. We said that we are looking at a number of efficiencies in our opex. We said that we still felt confident in our—I should say we have a target of getting to 15% operating margin in 2020, but we said that in order to do that, we did have to reduce the intensity of our expense, and so we have a number of initiatives across just about every function to try to take costs out, and these restructuring costs reflect the outcome of those actions. There'll probably be more as we move through this year. But, we will, again, reduce the percentage of—the opex as a percent of revenue in 2020.

**Jim Suva:**

Now I follow. Thank you so much, I appreciate the detail and commentary. Congratulations.

**Gary Smith:**

Thanks, Jim.

**Operator:**

Our next question comes from the line of Meta Marshall from Morgan Stanley. Your line is open.

**Meta Marshall:**

First question from me, maybe just on kind of the more public (inaudible) Tier 1 win. You mentioned that that will kind of get towards run rate in the second half. Should we consider what we see in kind of the second half to be full run rate or will that continue to ramp in calendar year 2020? Then, may just some reflections on 400, our timing, and just your timing, and when you see the market developing, is the second question. Thanks.

**Gary Smith:**

The Tier 1 you allude to, I would expect to continue to ramp for ’20, so we’ll see a little uptick in our forecast, I believe, for the second half, but it’s relatively small, relative to the size of our business, for sure, but we’d expect most of that to come in ’20.

**Scott McFeely.:**

On the ZR question, I’d say the market timing, I think, is late 2020. As we announced with our WaveLogic 5 family, we fully intend to be in the marketplace in that timeframe. I’d also remind, though, what we said on the last call. The ZR spec as it is, and you sort of look at the different applications that make up the Optical market space, we do believe it’s a relatively small portion of that market. I think the last time, we said sub-5% of the overall market.

**Meta Marshall:**

Great, thank you.

**Gary Smith:**

Thanks, Meta.

**Operator:**

Our next question comes from the line of Catharine Trebnick from Dougherty. Your line is open.

**Catharine Trebnick:**

Thank you. Great quarter. Thanks for taking my question. One clarification. Was that 34% of total revenue for non-telco, Jim?

**James Moylan Jr.:**

Yes. Yes, it was, Catharine.

**Catharine Trebnick:**

Okay, and then the other question is—I've heard some chatter during the quarter that there was an organizational change in North America, and could you address some of that chatter, if you wouldn't mind? Thanks.

**James Moylan Jr.:**

We're sitting here wondering what you might have heard. We're always having changes in our organization, but there were no major changes at the senior executive positions, that I'm aware of, unless Gary knows something I don't know.

**Catharine Trebnick:**

No, to be clear, to be fair, it was around AT&T, the service end, some change in leadership around AT&T, to be totally fair.

**James Moylan Jr.:**

Yes, it's part of a larger restructuring of our go-to-market group, in which we have just changed how the organization works. The fellow who ran the AT&T account is still active in the account. He's taken another positon in a revised organization. There's nothing to see here, not to worry, we're having a great time with AT&T.

**Catharine Trebnick:**

Okay, thank you very much.

**Gary Smith:**

Thanks, Catharine.

**Operator:**

Our next question comes from the line of Fahad Najam from Cowen. Your line is open.

**Fahad Najam:**

Hi, guys. My question was on your North American commentary. Can you provide us a little bit of detail as to what's driving the outlook, other than when you said AT&T is going to be flat but growing? What's the other growth driver besides (inaudible) that's fuel your outlook? Is it new footprint win with CenturyLink that's fueling your outlook, (inaudible) to what's happening in the North American market.

**Gary Smith:**

I would describe it as share gains across the board. It's Tier 1s, it's new Tier 1s. You mentioned CenturyLink. It's new logos into the cable space, as well. Strong Tier 2, Tier 3 performance, web-scale, government, the enterprise business, as well. So, it really is very broad-based in North America, and we think it's sustainable, obviously, given the visibility that we have into the second half of the year. So, it's extremely broad-based.

**Fahad Najam:**

Okay, and how much of these new footprint wins do you have relative to your previous wins? How much is the software content? Is it larger than previous wins that you've had recently?

**Gary Smith:**

I would say it's sort of consistent. We've got some good opportunities on the Blue Planet side in North America, but obviously, from an overall revenue point of view, that's relatively modest, but important strategically to us. We've had some significant progress there, which I think bodes well for the validation of that platform, but obviously, from a materiality point of view on revenue, it's not hugely impactful. We've had a number of new wins in North America into the cable space, obviously a couple of the Tier 1s that you alluded to, and we continue to take share. I'd summarize it again by saying sort of flight to quality.

**Fahad Najam:**

Okay, appreciate it.

**Operator:**

Our final question today comes from the line of Tim Savageaux from Northlane Capital. Your line is open.

**Tim Savageaux:**

Thanks a lot, and congrats on the great results. My question is—it looks like Tier 1—revenues with your two largest Tier 1s may have increased something in the order of 50% year-over-year in the quarter. I wonder if you can kind of comment on that number. The question is, as you look at that increase, which seems to be responsible for a fair bit of the upside, can you characterize that growth relative to increased spending at those customers, whether it's pre-5G or access, metro, what have you, relative to any potential share gain from competitors in those accounts? Which would you say was sort of more central in driving what I think was the real focus of the kind of unanticipated growth in the quarter, at least from our perspective?

**James Moylan Jr.:**

It certainly did impact the quarter. I would say that we started the year expecting growth out of both of those accounts, but certainly not 50%, and I don't think that they will grow 50% year-over-year. I think we had an exceptionally good quarter with both of those customers and so I would not—we've always said don't look at any individual quarter as a trend, and I would highly emphasize that in this situation. We're engaged—we're involved in just about every big project that they're doing, maybe it is every Optical project that they're doing right, and in both cases, I think their spend is up a bit this year, but don't expect 50% growth in those two customers, and we emphasize those aren't the only North American customers that are doing extremely well.

**Tim Savageaux:**

Understood, but it seems at least some of that is forward-looking in terms of the new wins, in terms of what impact in a quarter. It does seem like your current customers are more central to that. Just wrapping it up for me, with regard to international—I think I missed some of your comments earlier—it looks like that pretty much flattened out. I assume India was a drag in the quarter, and maybe, I guess, partially offset by Japan. Is that a fair summary?

**Gary Smith:**

Yes, that's a fair summary. We kind of expected—India's been on a massive investment program and we expected this year some digestion of that, frankly, particularly given the election year, as well. So, I think that will be our view, is just sort of flat for the year, but other markets have taken up the weight on that, particularly Japan, and some of the other Asian markets are looking for us for the remainder of the year. Also, we feel pretty good around Europe as we go into the second half, as well. We feel that some of the growth we see will come out of the European marketplace. So, we think it's sort of pretty balanced.

**Tim Savageaux:**

Okay, thanks, and congrats once again.

**Gary Smith:**

Thanks, Tim.

**Operator:**

We have no further questions in queue. I'll turn the call back to Mr. Lampf for closing remarks.

**Gregg Lampf:**

Thanks, everyone, for joining us today. We appreciate your interest. We look forward to catching up with everyone over the next several weeks. Have a good day.

**Operator:**

This concludes today's conference, you may now disconnect.