## **Sprint Information Session**

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## Q&A

Q1: I have a few questions regarding the network-related area or the capital expenditure. You talked about increase 20% of macro cells in the next three years, deployment of 2.5 GHz in macro cells from current 50% to 100%, and CapEx as high as \$5 billion to \$6 billion for next year in guidance. I suppose it is for macro cell deployment purposes. My question is that whether the high CapEx will be continuing on from next year.

A1: What we have said from a CapEx perspective is we expect to increase our CapEx to \$5 billion to \$6 billion over the next two to three years, and in the mix of the CapEx in each of those years will shift between those different components that I talked about previously. For example, the upgrades of adding tri-banding or adding the other spectrum bands to our existing sites, most of that will occur in fiscal '18, with long tail into '19. Conversely, the new sites will begin ramping in '18, but more of them will come on air in '19 because the new builds have a little longer lead time, so you will see all of them are concurrent streams, but the mix across the years will vary based upon those. It is the same with massive MIMO. Those who will start in the next quarter here, and ramp as we go through '18, '19, and '20. It is the same with small cells. Those will continue to be relatively consistent year-by-year as an additional component of that capital program. Therefore, those four main components over the next three years, and each year we will have a little bit different mix as they do have different lead time and so forth, but that is how we see the capital plan over next two to three years.

Q2: In terms of how Sprint 5G would be different from your peers, you often talks about advantage of using 2.5 GHz. T-Mobile announced in February that they are going launch 5G in first half of '19. I would like you to clarify. You said T-Mobile will use 10MHz of 600MHz for both uplink and downlink, while T-Mobile always talks about 31MHz of 600MHz is going be used. Is the 10MHz part of 31MHz? Also, T-Mobile is appealing that they have a plenty of bandwidth in 600MHz to use for 5G. Would you please give your view on that?

A2: T-Mobile, as referenced, first half '19 as a mobile 5G timeline, that is roughly the same timeline that we have talked about. Really, that is because that is when the first

smartphones are expected to be available on the market. Therefore, from a network perspective, it will front run that timeline with a lot of the work being done in '18 to prepare for that, but the first smartphones are expected to be available in the first half '19, so that is the timeline.

Some of the differences would be, we have certainty that Qualcomm is including the 2.5 GHz in their initial 5G chipsets. It is unconfirmed that the 600 MHz will be included in the first 5G smartphones. Therefore, they may have some delay in getting devices based on the 600 MHz that they are using. They have, on average, 30 MHz of the 600 MHz spectrum that they acquired, and they have said that they will use roughly 10 MHz for 5G and the remainder for LTE. That will be more of an IOT footprint, so obviously very good coverage, but a very thin layer that will not have the full-speed capacity that a wider channel would. The 10 MHz is paired, so that will be five by five (five uplink/five downlink). All the spectrum in the US except for our 2.5 is FDD, so it is paired, so that 10 MHz channel is a five up and five down.

They will supplement with millimeter wave in dense urban areas, similar to Verizon and AT&T, so they have a little bit of bookend approach, but it still leaves Sprint as the only one that will have wide channel experience on a broader coverage area. Therefore, we would expect to see theoretical speeds in excess of two gigabytes per second early on there, and going even further as you continue to unlock the full toolbox of 5G capabilities.

Q3: Could you tell us more about cost reductions? Which areas have you reduced cost already, and which other areas that still have some more room for further cost reductions, please?

A3: A continued focus, we have taken \$6 billion out in the last four years, and it has really come across just about every part of the business. Therefore, from a cost of service perspective, we have significantly lowered our backhaul expense for sites by transitioning away from TDM to IP-based solutions complementing with wireless backhaul capabilities with both microwave and UE relay wireless, moving to dark and lit fiber that further lowers the cost curve. We have seen backhaul rates continue to drop in the US, so increasing the throughput at the cell site, while at the same time lowering the cost. We have lowered our network labor expense. We insourced the network management from Ericsson back to Sprint and significantly lowered our roaming expenses for network, so a significant reduction across cost of services.

We still see more opportunity to lower cost of service going forward with further optimization of our backhaul mix, moving more to dark and lit fiber and driving down the cost curve, further optimization of the labor model and roaming with the incremental sites. Now, there will be some offset with incremental cost for site upgrades and new sites, but net, we still think there is opportunity to drive that line down.

From an SG&A perspective, again, we have lowered our marketing expense, getting away from sponsorships like NASCAR and NBA, and focusing our marketing dollars on more action-oriented, customer-oriented platforms, increasing digital media, optimizing through big data, and better purchasing or media buying, so getting multiple 15 second ads versus one-minute ads, or 60-second ads or 30-second ads and trying to optimize. In that regard, we have built an in-house creative agency we call Yellow Fan Studios, so we have insourced hiring some creative talent, some of the production of our creative media instead of all using expensive agencies in New York and LA.

From a sales perspective, we have significantly lowered the cost per transaction by increasing our distribution mix more towards direct channels with the distribution optimization. Increasing year over year, digital sales has helped lower that cost as well. Simplifying the business, both in terms of rate plans with unlimited, as well as device financing going to one single purchase method have allowed us to lower our customer care expenses over last few years; simplifying the business to lower the inbound calls or the areas or customers may have questions; IT simplification across different platforms and consolidation.

Therefore, as we look forward, we still see additional opportunity to improve marketing efficiency, lower our cost per box with further digital transformation and increasing capabilities. G&A, we continue to optimize. We have talked about some of the management and then ultimately through the organization streamlining of other reporting structure and ultimately fewer employees in the G&A functions while we grow employees in the sales and customer-facing areas of the business, so kind of repositioning the balance of labor expense in the company to be more customer-facing.

IT continues to see opportunities over time with billing platforms and some of the IT systems to drive costs out. Therefore, multiple opportunities exist. We think that there is still significant opportunity on a gross cost reduction basis. Our new CFO, Michel Combes, has a strong history and has brought a fresh pair of eyes. He agrees that the momentum is to continue. As we look at '18 and years to come, the question for management is what is right balance of reinvestment versus net? That is really the piece that we look at year-by-year, but on a gross basis, still plenty opportunity to take costs out.

Q4: You mentioned you are going to launch 5G service in 2019. When do you think it will be a national offering? Also, how do you think your subscriber base could change if indeed you do have a much better offering with 5G than your competitors?

A4: When we think about 5G, we talk about having the first nationwide 5G. Again, others will have kind of some dense urban footprints, but not very widespread, so we will work with our network vendors to accelerate the production of the new massive MIMO radio

antenna, and deploy those as quickly as we can, starting with the biggest cities to have the greatest impact. We announced the first three to be Chicago, LA, and Dallas, and then other large markets to follow. We will deploy those on a more widespread coverage, and that will continue to evolve over time just as the initial transition of 3G to 4G was.

Therefore, what we expect is, one, because our 5G strategy really is riding the back of an LTE improvement strategy, we will get the benefit in terms of customer experience and perception by fixing the basis of the LTE network at the same time that we are doing 5G, and not just trying to skip to 5G. It is really complementary. Therefore, as new devices come for 5G, that creates new revenue opportunities. We think about the fact that today our acquisition pricing is at a discount to Verizon and AT&T, and if we dramatically improve the LTE network performance and have a leading 5G product, we can have an opportunity to close that gap which has significant ARPU revenue opportunity without even having to be priced as a premium in the market. Just to be able to close that gap where we are today. Based upon greatly improving our LTE product and having the best 5G product creates a lot of revenue opportunity just from a traditional device set of smartphones and mobile broadband today.

Then, obviously, over time, you look at all the new applications to services that can be brought to market for 5G that will provide incremental revenue opportunities over time, obviously, SoftBank Group and SoftBank Vision Fund are investing in a lot of those types of innovative companies that will be transformative in the 5G era, and we look to have a fantastic connection platform in US. Therefore, I think, there is obviously a lot of opportunity from a revenue perspective, from a churn perspective, and even from a gross add perspective by being able to market products and services, and any differentiated network experience even for smartphones that can capture that.

In fact, while we are early '18 and we are saying first half '19, we have already put together an internal 5G team with experts from each of the different functional areas of the business (so network, marketing, sales, business) that is focused a year in advance of really developing the products and services, the messaging, the marketing to have a plan in place when 5G is here, not turn the network and then figure out how to go market it. Therefore, the key will be to make it very tangible to customers, something they can relate to because just saying 5G will be very noisy. Every carrier is going to be marketing 5G. Therefore, we need to find ways to make it very crisp, very tangible to the customer of what that experience will be like and how it benefits them, so that is some of the things that we are working on in parallel while the network team and the device team is preparing for 5G.

Q5: Is OneWeb one of those companies that you could be working with? Are there any concrete plans to offer a joint service? I heard that OneWeb will be launching in Alaska quite soon, apparently.

A5: Yes, OneWeb would be one example of the SoftBank group companies, and I think there is a very complementary relationship to have commercially in the market for two potential paths, one a complementary service for very remote area from an access perspective, and then also as a backhaul alternative for Sprint terrestrial cell sites in more remote areas. Therefore, we do think that there is nice opportunity to partner with OneWeb as they develop their business over the next few years.

We talked about kind of near term plans for our network with 800 MHz spectrum deployments on existing sites for incremental coverage, 20% increase in macro sites, and I think OneWeb can come in the next wave of that incremental footprint expansion and coverage in remote areas where Sprint may not have coverage, and frankly, even any of the other carriers may not have coverage. Therefore, it could be a unique opportunity over time.

Q6: I have two questions on 5G, which are technological questions. With regard to massive MIMO in your presentation, I thought you said that you would be able to upgrade half the antenna for the LTE and another half the antenna for 5G for the MIMO set up. Could you please clarify whether you meant by this is that such software upgrades would allow Sprint to make a gradual shift into 5G, or that you must deploy half the antenna in a short term? My concern is that there might not half of the users using 5G immediately when you launch. In that case, if you put half of the capacity to 5G, you might run short of LTE capacity. I would like you to give me a bit more elaborate on that.

A6: When we deploy the massive MIMO radio and antenna, it will be softwareupgradable to 5G, but what that will enable is 32 by 32 massive MIMO for LTE, which is a significant improvement in the experience of performance for LTE from today, but also then immediately have a 5G footprint with that software upgrade for all the sites already on air that have that hardware platform. We can shift that over time more towards 5G as more of the usage gradually – so, to your point, it will take time for the base of devices to move towards 5G, and so we can shift more towards 5G in the future as more of the tonnage of the network moves to 5G.

However, the other unique element that we expect with this is that devices may have the capability to what we call 'dual connect', and they will be able to connect to both 4G and 5G simultaneously. That also will ease the transition compared to the initial 4G where it was very one or the other 3G and 4G. The technology evolution I think will allow for a dual connect to connect to both the LTE and 5G, and allow that to be a much smoother transition.

Q7: Talking about an ARPU trend towards 5G, can we understand that when the 5G is in place, we can expect smartphones with higher connection speed, which allows you

a monetizing opportunity? Or if it is hard to get higher APRU, as you mentioned the bit cost earlier, are you basically expecting OpEx to decrease so that to improve profitability?

A7: Two things here, the short answer is yes. We absolutely believe that there is an ARPU opportunity. Not only with 5G, but, because our 5G is really on the back of an LTE enhancement, the improving network performance even from an LTE perspective on the existing base will be dramatically improved to allow us to price closer to competition and remove the discount that we have in the market, so that is accretive to ARPU. Then, being able to market a tangible product and services that take advantage of 5G and having a broader 5G footprint than peers in the early periods we think can provide incremental opportunity for a premium unlimited plan, if you will, for 5G. That is on existing devices, and then the incremental revenue streams that will come about from IOT and new applications over time.

Q8: With regard to millimeter wave, you often talk about 2.5 GHz, which supplies you enough bandwidth for 5G. If so, is my understanding correct that even if an auction were to be held in November, you would not participate in the auction? If the situation is that while other carriers have millimeter wave, you don't have, what competitive disadvantage will you have? Also regarding CBRS ---it is not clear whether the auction is going to happen or not--- in case it happens, is there any possibility for you to participate in the auction? If your competitors happen to win the CBRS auction, how do you view your company's competitive position?

A8: Today, Verizon and AT&T in particular have focused their initial 5G deployments in a millimeter wave band; Verizon at 28 GHz, AT&T in the 39 GHz. Based on private market transactions, they have bought companies that held those licenses. Part of it is playing the cards they are dealt. Verizon has the least amount of spectrum today in terms of sub-6 GHz, and the general market view is that they are very constrained just meeting the LTE capacity. Therefore, they do not have any available spectrum to start an LTE or 5G deployment other than millimeter wave, so they do not have a choice.

Millimeter wave has very wide channels, but very limited propagation, and very complex physics in terms of significant signal loss with rain, foliage, or windows. It does not penetrate walls. Therefore, it has some implementation challenges. As far as how that impacts the upcoming auction, like I said, they have acquired through private market transactions. The US is expected to start millimeter wave auction as early as November or early '19. I would say that we will look at those auctions and there may still be a good case for millimeter wave as a complementary or dense urban offload, but it is not a very good starting point to have a ubiquitous 5G footprint. Therefore, maybe as incremental capacity in certain locations, particularly in top five/top 10 markets where

you have a high population density, but much better suited to be complementary secondary capacity spectrum than your foundation layer.

The other spectrum you referenced, CBRS, is currently not held by any operators. It is actually in use by the Department of Defense, 3.5 GHz. That is a band that is globally drawing a lot of attention from a 5G perspective. Unfortunately, in the US, it is a bit encumbered, not only to the Department of Defense, but other public safety platforms. Therefore, while a portion of it is expected to be auctioned, maybe 70 of the 150 MHz, even then, you will have restrictions where you have to have software platforms that can real time get off the spectrum. Therefore, even if you purchase license spectrum and then there will be another chunk that is unlicensed access. In all cases, if the Department of Defense or other agencies have a need for that spectrum, you have to get off. Therefore, it is not ideal in that regard, so it is always a prioritized access to that band. That makes it a little bit complicated to rely on as a main layer. Again, it can be complementary where you have been offload there, but it is hard to build a foundation on something that you do not have full control over.

Another band that is talked about is the C band, which is 3.7 to 4.2. However, that is equally as complicated because there are thousands of satellites in the US operating in those bands. We would have to move all of them to new bands to clear, and that maybe 2025 or later before that is really useable for carriers in the US. Therefore, I think down the road, those would be kind of the next ideal bands for 5G, but they are very complicated, and I think it will take some time before they are readily available in market for operators.

Q9: Given that you will see several billions of corporate bonds to be matured every year going forward, and that your funding costs for issuing notes have also been increasing since last year when the merger talks with T-Mobile was ceased, how would you manage the upcoming maturities? In the earlier question on auction, you said you may possibly participate in the auction for millimeter wave. When you become in need of significant amount of capital, what financing source do you think would be available? Would you consider financing methods like the spectrum-backed notes?

A9: We will continue to look at our upcoming maturities opportunistically. If you look at couple of quarters back, we actually saw opportunity to proactively tender for some of the upcoming maturities. We retired \$1.2 billion of the November '18 9% Junior-guaranteed notes out of the \$3 billion note because there was an NPV-positive opportunity to retire higher coupon debt. Most of our notes today are non-callable, but we will continue to look at opportunities to address different notes that present opportunities to drive that down.

We have dramatically lowered our cost of debt over the last couple of years, and even recently in the last 30 days have raised almost \$5.5 billion at attractive rates. We

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did high-yield issuance in February that basically priced in line with the maturity a year earlier, the lowest new issue concession that we have ever had and that the banks had seen. Then we issued nearly \$4 billion of spectrum-backed notes that closed yesterday at a weighted average coupon 4.93, so materially below our average cost of debt.

Those all also addressed another thing, which is they all have longer tenders. The unsecured was an eight-year, maturing in 2026 which is strategically a year we had no maturities, so kind of balancing the maturity stack, if you will. Then spectrum-backed notes are roughly half in terms of seven-year and 10-year. Those have three-year interest only period on the seven-year and five-year interest only period on the 10-year, so that continues to give us additional runway not only from a capital plan for the network, but also for near-term maturities. From a calendar '18 perspective, we have \$1.8 billion of the junior guaranteed note in November. Otherwise, the spectrum amortization on the first issuance, which is \$200 million a quarter, so we feel very good about the runway from a redemption perspective or a maturity perspective, and access to both unsecured and secured baskets. Junior guaranteed is a basket we have not utilized and could utilize in the future, so the multiple baskets we think that we can look at opportunistically based on market conditions at various times in the future to see what is the most efficient way to continue to lower interest expense and cost of debt, and maintaining good balance in the capital structure.

Q10: Regarding M&A, would you give us some update on your strategy? At a conference held in early this month, your CFO talked about the importance of scale. Are there means/tools other than the merger with T-Mobile to expand the scale? While AT&T is aggressively acquiring a media company, do you think the collaboration with Hulu as you talked briefly is enough? In other words, don't you need to pursue acquisition? Is it fair to say that you can leverage Altice infrastructure, so you don't need other cable companies. You could do a lot of collaborations through SoftBank Vision Fund for telematics on top of 5G, What is your thought on further M&A going forward?

A10: The comments you are referring to is, I think, related to cooling off, if you will, around the M&A of the prior quarters, and kind of clarifying that the doors never close necessarily. Obviously, the day-to-day focus is to continue to deliver a significant shareholder value by executing our turnaround plan, which has had great success in last three or four years, and we see continued opportunity going forward, but recognition that it is a scale industry and that we always evaluate opportunities that present themselves horizontal scale, vertical integration and convergence that drive additional shareholder value or accelerate that path. That is really what he is referring to. Like I said, it could be wireless at some point in the future. Cable is moving towards wireless. AT&T is moving convergence by going into contents. You are seeing signs of convergence, and it will play out over time. Really, the focus is to execute the standalone

plan, keep an open mind to opportunities that may present themselves in the future recognizing it is the scale industry.

In terms of telematics and SoftBank Group, obviously, we want to work very closely with the various SoftBank Group and SoftBank Vision Fund companies to understand ways that we can partner in the US and grow value for both companies by working together. That is certainly something that we are looking at and we will continue to. Telematics is an area that we think has a nice opportunity in 5G in particular. Public safety, transportation, telematics, health and telemedicine, there is a number of verticals that we think can blossom when you talk about ultra-low latency, speeds, and the cost curve for small cells that would make those practical.

Q11: Recently, the churn rate is increasing, and other companies also introduced unlimited plans. In the future, will the churn rate be exacerbated, and if so, what is the reason for that?

A11: Churn has increased in the last few quarters, and we said on the last earnings call that we expect to peak here in 2018, and decline thereafter to competitive levels closer to peers. The reason for the increase is three main areas, and again, largely intentional or self-inflicted based on business decisions that we think are value accretive.

One is, because we have taken the position to not make our acquisition rate plans available to the base to avoid a write down, we have high legacy ARPU subs in the base. Therefore, as the competitive market has shifted with all carriers having unlimited and increased offers, the question is, do you optimize all those customers in the base and take an immediate hit to revenue and cash flow, or do you work through that incrementally and lose a few along the way? Certainly, it is NPV-positive to have a little bit higher churn and retain the majority of those at higher ARPU than to take a big revenue and cash flow hit.

One of the things that is common to every operator is, when you think about the dynamics of the base, there is really two cohorts. There is a smaller cohort which are actively engaged and evaluating offers in the market, and there is a bigger cohort who are generally on autopilot, right? They are happy. They are not really looking, so they maybe on higher rate plan, but they are not really shopping and not really checking to see if there is a better deal. What you would hate to do is overreact and address a big population that customers that may have never left and sacrifice that revenue opportunity to respond to a smaller cohort that is actively looking. That cohort will work itself out over the coming quarters here, and they will either stay for compelling offers at Sprint or they will leave, but that cohort will kind of work through and will be done.

The second is somewhat consequence of success in that Sprint has been growing at a higher rate than our peers as we had 12 consecutive quarters of year-over-year growth and postpaid phone gross adds when others have been declining. Therefore, when you compound that with our leasing offers that are 18 months versus installment plans of 24, you come into a higher percentage of customer that are off their commitment because you start rolling over those 18-month terms, and some customers would like to hold or keep their device, you have higher percentage off commitment. What you historically see is the churn on a cohort level, churn from off-commitment customers are higher than the churn for an on-commitment customer, which makes sense. Therefore, it is really more of a mix that is driving some incremental churn. However, that will also work itself out over time as you upgrade customers and bring them back into commitments. Those are the two that are somewhat intentional, the right economic decisions, but have some near-term pressure on churn.

The third is recognizing the network from a customer's perspective is very local. Therefore, while, at a macro level, network KPIs and performance continues to improve, and you see that in the third-party data, we have implemented something that we call quality of experience (QoE), which is a statistical scoring model that scores every individual customer on a monthly basis based upon the types of applications and services that they use on their device relative to their network experience. We have seen a very high statistical correlation between those that have a high score for QoE and very low churn, and vice versa. What that allows to do is provide information that the network team on a very localized level between our base marketing group and our network group of areas on a localized basis where we can be more targeted and improve to have a greater customer benefit, customer impact. That is taking more surgical approach to churn and the network plan to improve customer experience on very localized basis where we can improve.

We are confident that churn will be coming down as we get past fiscal '18, and we think that the network strategy and customer experience improvements that we have planned in simplifying our offering will drive churn down in the future.

Q12: What is your estimation for the speed of your 5G network in 2019? I am asking about the actual speed, not the theoretical speed.

A12: In terms of peak speeds, you will see peak speed in excess of two gigabits per second. From an average speed perspective, I do not have a good estimation, only because it is something that will be high-capacity in the beginning and a limited number of customers as you have to get new devices for 5G capabilities, so I think even average speeds will be very high until you load more on the network. Even then, as you shift more of that traffic, you can then allocate more of the spectrum and resources to 5G to continue that. Therefore, I do not have an expected average speed, although we would expect it to be materially higher than our peers, just given the spectrum allocation and advantages that we have.

Q13: Could you tell us about your test or tie up with Altice? What was the background behind that test? How is it going, and what would the future look like if that test is successful?

A13: Altice presented an opportunity for both companies, really, to test that convergence model in the US through a very mutually-beneficial construct that does not require M&A where we can look at small cell deployments on cable infrastructure and testing what we believe are very attractive synergies between the wireless and fixed infrastructure, both for deployments, but also for backhaul. That has gone very well to date, very good engagement from the Altice team, very good initial results in terms of deployments. We provide the equipment. They do the installation with their engineers on their overhead lines and other infrastructure, so it is going very well. We are ramping a production of those strand-mount equipment and tailoring them to the specs of their specific footprint (power and backhaul specifications). That will continue to ramp, and we have said we expect to have 15,000 strand mounts over the next few years with those cable partners.

Obviously, then, migrating our macro sites to discounted rates on their fiber backhaul is attractive. From their perspective, they gain the benefit knowing they want to get into wireless. So it is a construct that works very well and allows both companies to see what the convergent model could do on a commercial basis. Early results are very positive. Momentum is good, and both companies see it as a win-win.

Q14: What kind of profit sharing agreement would you be looking for from that MVNO agreement?

A14: It is a somewhat traditional MVNO agreement where it is paid by the gigabyte, typical type of model. We do not share what the commercial terms are. They can design their go-to-market pricing as they fit, similar to what Xfinity or Comcast has done today on an MVNO basis, so they will design their plans and bundling with their existing customer base and pay us for the usage.

Q15: Just like to confirm the coverage of 2.5 GHz. Presently, your coverage is said to be in 100 cities with population coverage of 200 million and only 50% cell sites are deployed with 2.5G. Are you going to increase the ratio to 100%? I suppose T-Mobile will claim their 5G service covers 300 million population with 600 MHz. Could you confirm whether I am right or not?

A15: I think maybe mixing a couple of different data points there, the reference to the spectrum was more just highlighting that our holdings in the top 100 markets is 160 MHz, but we have the licenses on a nationwide basis. It is similar to peers in terms of total LTE, and so that macro network, we expect to deploy the 2.5 on nearly all of those

sites, so it will be well beyond the top 100 cities. Therefore, the same would apply as we upgrade to massive MIMO on those macro sites, so it is not restricted to 5G in just the top 100 cities. We would expect it to be a fairly ubiquitous footprint for 5G, expanding over time starting with the biggest markets to have the greatest initial benefit, but then expanding from there over time.

Q16: By the introduction of 5G, how much do you expect to reduce the bit cost? And with the massive MIMO technology do you believe you would achieve higher bit cost reduction compared with your competitors?

A16: Two components. 5G is expected to significantly lower the cost per bit. We think that Sprint actually will benefit from that more than others, partly because deploying 5G on the 2.5 will leverage existing infrastructure to very large extent, and so getting the technological benefits of 5G on top of less incremental infrastructure investments will allow that cost curve to come down.

When you think about a millimeter wave deployment of, say, Verizon or AT&T, you get the efficiency of 5G, but because it is all incremental infrastructures on very, very dense and new ecosystem that is not scaled in terms of equipment, the cost per node and the cost per gigabit on standalone millimeter wave network is going to be very high. Therefore, a benefit from a 5G perspective certainly, but what we are also very excited about is, if you just look at LTE, which is still going to live on for quite some time as devices have to turn over, Sprint is in a very unique position from a cost-per-bit perspective. We talked about moving to lit and dark fiber, which costs continue to drop significantly, but when you think about meeting capacity demands (that is the primary focus in the market today), there are really three ways to address capacity. One is technology, MIMO, 256-QAM, various aspects, but that is common to all operators, right? Therefore, ultimately, it comes down to either have to increase the number of sites to split the existing spectrum, or you have to bring on new spectrum or more spectrum.

Therefore, the fact that Sprint has significantly more spectrum than anybody else and it is simple in that it is in three bands, and really in one band with the 2.5, we can continue to add capacity through 2.5 on existing infrastructure, and we will require less total cell sites than what others will to create capacity. That will have an ongoing OpEx (and certainly has a CapEx) efficiency benefits, so that is where we think from a costper-bit perspective, both for LTE and for 5G, Sprint has a unique advantage in opportunity.

Q17: Do you have any specific figures for cost per bit reduction at 5G compared to that at LTE? In addition, how further would you achieve the reduction compared with your peers?

A17: I do not have a good ratio or statistic to give you today. I would have to check with our network CTO to see if they have a good benchmark there. But clearly, I think, when you look at just the structural comparisons, there is a very good opportunity there.