



Financial Analyst Meeting  
JW Marriott – Chicago, Illinois  
Tuesday, February 27, 2018

## **PARTICIPANTS**

### **Motorola Solutions Executive Participants**

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**Chris Kutsor** – Vice President, Investor Relations  
**Greg Brown** – Chairman and Chief Executive Officer  
**Bruce Brda** – Executive Vice President, Products & Solutions  
**Andrew Sinclair** – Corporate Vice President, Software Enterprise  
**Kelly Mark** – Senior Vice President, Managed & Support Services  
**Jack Molloy** – Executive Vice President, Worldwide Sales & Services  
**Gino Bonanotte** – Executive Vice President & Chief Financial Officer

### **Other Participants**

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**Keith Housum** – Analyst, Northcoast Research Partners, LLC  
**Paul Coster** – Analyst, JPMorgan Securities, LLC  
**Matthew Cabral** – Analyst, Goldman Sachs & Co., LLC  
**George C. Notter** – Analyst, Jefferies, LLC  
**Tavis McCourt** – Analyst, 12<sup>th</sup> Street Asset Management Company, LLC  
**Adam Tindle** – Analyst, Raymond James & Associates, Inc.

## **MANAGEMENT DISCUSSION SECTION**

**Announcer:** Ladies and gentlemen, Chris Kutsor, Vice President, Investor Relations.

### **Chris Kutsor, Vice President, Investor Relations, Motorola Solutions, Inc.**

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Thank you and good afternoon. Welcome to the 2018 Motorola Solutions' Financial Analyst Meeting. Very happy and pleased everybody could join us in Chicago and for those joining online via webcast as well. We will have a replay of today's events and the slides available sometime probably early tomorrow.

So I do have a few housekeeping items to cover before we get started. First, as I'm sure you guys are used to seeing, our slides today will include GAAP and non-GAAP reconciliation for your references. During the presentation, we'll reference non-GAAP results, including forward-looking statements, unless otherwise noted.

Also, another housekeeping, a number of forward-looking statements will be made during this presentation and during the Q&A session of the meeting. These statements are based on current expectations and assumptions and are subject to a variety of risks and uncertainties.

Actual results could differ materially from these forward-looking statements, and information about factors that could cause such differences can be found in the Risk Factors section of our 2017 Annual Report on Form 10-K and other reports and filings with the SEC. We do not take any duty to update these forward-looking statements.

So more interestingly, we've got a heck of agenda lined up for you today that we're pretty excited about. So we're going to kick it off with Greg here in a minute, and then Bruce and Andrew will come up to talk about products and our software enterprise that you've been hearing a lot about that will follow a Q&A specific for both Bruce and Andrew.

After that, we'll take a short break. Then Kelly Mark will come up to talk about our services organization and Jack Molloy, our worldwide sales organization. They will also have a Q&A for any clarifying things you would like to hear more about, specific to both Kelly and Jack.

Following that, Gino will come up, talk financials and then both he and Greg Brown will be available for a wrap up Q&A. So we're very excited you're here. Hopefully, you'll take a lot away from the day. It should be information packed with relevant and insightful info. And if not, please raise your hand.

So with that, let's get started.

**[Video Presentation]**

**Announcer:** Ladies and gentlemen, Greg Brown, Chairman and Chief Executive Officer.

**Greg Brown, Chairman and Chief Executive Officer, Motorola Solutions, Inc.**

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Good afternoon. Thanks for coming in for a couple of hours with us here in Chicago. I'm excited to share with you an update of the business along with my management team. What I'm going to cover is three things, major performance and progress since we last met, about three years ago from our last financial analyst meeting; second, talk a little bit about 2017; and third, reorient and update you on 2018 and beyond.

So just to kind of level set, the strategy of our company is an end-to-end platform orientation and to extend our market leadership in mission-critical communications and the deployment of those platforms and beyond. So when you kind of take stock, we have a significant installed base of LMR platforms, probably more than 12,000 systems installed globally and we're going to build on that to monetize services, to build out the command-center software applications. You may have had a chance to see outside with the pods, and more recently, add to those products and services with the acquisition of Avigilon.

So leverage the installed base of the LMR platforms. Second, we're building out a command center software platform led by Andrew Sinclair that is taking 911 call handling, command and control, dispatch consoles and records and evidence. So think of what we're trying to do in command center is we want to be the ERP of public safety.

In addition to that, we bought Avigilon. I'll talk about that in a minute. What we like particularly about that is not just the incremental opportunity and the adjacency and public safety in the U.S. federal business, but that, too, is an end-to-end platform, highlighting and reinforcing video surveillance and analytics.

So you know us well enough by now. We're not interested in commodity businesses. That's why the journey of Motorola has been divesting commodity businesses. We like businesses that are end-to-end. We like platforms. We like the ability to differentiate where we can provide more value-added services and monetize those services over time.

Since we last met growing recurring revenue is up, three years ago, it was 18%. Today, it's 28%. We've had very good operating leverage. I mean, that's really the story of what we're about, growing revenue, disciplined cost management, so more capital is available to deploy. We've had operating margin growth substantially period-over-period from three years ago to today, as well as EBITDA growth. But we want that flywheel of growth for operating margin expansion and cash flow generation.

So since we last met, we have about 15,000 people a little bit less. 50% of the people in our company – half – are brand new to Motorola Solutions in the last three years. When you look at the additional people, roughly just under two-thirds of them are engineering and sales. So while we've leveraged our leadership position, gone into adjacent markets, have more of a services and software orientation, we also have been able to refresh the talent pool and upgrade skills inside the company.

If you look at the board composition, independent board members, half are new. We've got two representatives from Silver Lake, Egon Durban, Greg Mondre, and more recently Ken Denman, who – his expertise is mobile application software, and Joe Tucci, who ran EMC for over 15 years and arguably built one of the best enterprise sales forces in the country. They've been great additions to the board.

Three years ago, we didn't have Silver Lake. They put in a \$1 billion pipe. They have representation on the board. People – you ask me a lot about their contribution. I think that they have been very helpful around customer data and what we call KYC, Know Your Customer. They've helped Brda and the product and supply chain team around KYB or Know Your Business, skew reduction, operational efficiency. And the other thing quite frankly, personally, I think they are a very good strategy and M&A adviser to me. So I think it's been a homerun, the relationship with Silver Lake, which is now two and a half years old and counting.

Since we last met, we moved the headquarters to Chicago. I think that's one of the best things we've ever done. Quite frankly, if I had it to do over again, I should have done it sooner. We now have 1,100 plus people downtown in the West Loop on Monroe and Canal. We've retained one 12-story building in Schaumburg, but the whole revitalization – and culture is kind of a loosey-goosey word. But being in the city, access to the universities, new millennials, software talent, data scientists, it's a more vibrant. And I would argue more current company from a skill standpoint, and the move downtown has been very beneficial in that regard.

We have a mantra inside the company. Put your best people on your biggest problems or biggest problems/opportunities. In the fall, as an example, we refreshed the leadership in LMR business. John Kedzierski came out of Molloy's sales team, and he's now, as of the fall, running Land Mobile Radio infrastructure.

Scott Mottonen, one of our best engineering leaders, has moved over to lead subscriber devices. John Zidar, seasoned sales leader in public safety, he's moved over to run North America commercial markets. And as you'll hear from Jack, in addition to public safety, the commercial market opportunity in North America is pretty substantial, and we thought that move was a good one to make.

And one other one I would reference is we have an up and coming star in Chad Werkema, supply chain guy, really knows the business very well. He's moved over to support Molloy in North America sales operations. So we're continually looking at the talent, making sure we're doing the most around retention, development, growth, mobility, and enhancement of opportunities.

And then, finally, I would say – and this is a big one for me, I think our company and I'm proud of my team, I think we run MSI more as an owner than a manager. Now, that's a cute little saying, but in my 11th year as CEO and having experienced two activists and private equity now side-by-side, I think that's a huge advantage. So we think about the deployment of capital, we think about the strategic moves organically or inorganically through the lens of an owner not a manager.

Since we last met, and these I think you know pretty well, the dividend has been increased 53%. We've reduced the share count by 27%, now that's in the last three years. That's about \$4.5 billion of share repurchase at a price of \$68.61. If you go back and look at the separation of Motorola since 1/1/2011, we have spent 12.3 billion buying back shares at an aggregate price of \$58.58. We more than doubled EPS. We continue to be, I think reasonably good, at taking cost out of the business over this three-year period, \$200 million down, \$100 million down of your net for the acquisitions. And we also decided to just minimize our footprint. So we sold the Schaumburg campus for \$134 million. And the real estate owned footprint has been reduced dramatically. Along the way too, we outsourced our largest manufacturing organization to Sanmina in Malaysia. So we're more asset light. So we have more capital deploy around success based capital to grow the business.

And we implemented a new ERP system that's not for the faint of heart, but it's the culmination of two years' worth of work, probably two years plus. We've retired hundreds of legacy systems. We now have common systems and processes and probably most importantly, we now – we have one system platform by which we can grow services globally.

Since we last met, this is the total shareholder return and this is the ultimate scorecard. Me and my management team look at this all the time and we're proud of this, and this is good. But there's more work to be done and we think there's a lot more value that we can create.

If I shift to specifically 2017, we grew the business organically. It has grown five consecutive quarters. In addition to that, and I'm not sure this is as well-known, but North America which is roughly two-thirds of our business has grown organically in 2015, 2016, 2017, and we expect both the firm and North America to grow organically again in 2018.

We had record backlog, great earnings, record earnings. Operating margin has gone from 18% three years ago to 24%. EBITDA margin has gone from 21% to 27% and we had strong cash flow of \$1.3 billion. And lastly, I'd mention, as you probably know, we took action on the pension \$500 million of additional funding at 10-year treasury plus about 170 basis points. The importance to that is we don't believe any further pension funding is required until 2024 and beyond. So that will give us more cash flow and more capital available to deploy to continue to grow the company.

These are the acquisitions we made. Since we last met, managed services. Interexport, I call Interexport a mini airwave. We're always looking for mini airwave like acquisitions. Airwave has been great and software and command center applications, kind of three points here. One, in 2017, these acquisitions contributed \$665 million, \$350 million of EBITDA and about \$1.20 in non-GAAP EPS. If you extract them, the firm still grew nicely.

The other important point to note is I have a lot of questions on Airwave. We continue to work closely with the UK Home Office. More recently, you've probably seen there has been parliamentary hearings with what's called the Public Accounts Committee and as of today we believe Airwave will be extended.

More specifically, we just signed a multi-million dollar contract for a backbone ring to do backhaul to make the Airwave's network available several years beyond 2020. We will continue to work closely with the UK Home Office both on Airwave and ESN to make sure that their needs are met and we optimize the rollout of both networks.

If I take the acquisitions in 2018 both PlantCML, Airbus PlantCML and Avigilon, we expect PlantCML to close in Q1. We expect Avigilon to close in Q2. So we're now stating to you that we expect in addition to the guidance we just gave you \$350 million of revenue and \$25 million of EBITDA in 2018.

Now, these acquisitions are accretive on a standalone basis. EPS doesn't move because we're not doing share repurchase, because we're going to keep the capital to fund these acquisitions. Now, we will – we have done some share repurchase and we'll probably do \$70 million or \$75 million, but that's it. And that's to accommodate and account for dilution. But we feel very good about these acquisitions and their contribution in 2018 and what they mean longer term.

Avigilon was a big move. I first met with them, I think, in October or November in Vancouver, had breakfast with them. What I like is, this is a platform company. Edge device, video management, video storage, video analytics, 750 patents. When Bruce Brda, Paul Steinberg, the team operationally, after an MDA, went out to see them, the comment from Brda coming back was, they are very much like us. He called it the P25 for end-to-end video.

So we like this acquisition. It substantially increases the addressable market sizably. And, quite frankly, Avigilon has been enterprise and commercial market-centric and really hasn't pursued public safety, which we believe our go-to-market, both domestically and globally, can help with. And we think there's substantial opportunity in the U.S. federal business as well. So that's expected to close in Q2 and we'll update you accordingly as that unfolds.

So as you think of us, platform company, \$32 billion addressable market, its building blocks. We've got 12,000-plus systems installed. The focus on public safety LTE is the interoperability between public safety LTE and these LMR platforms, particularly the large ones. As you know, we've won five out of the five largest global awards to-date for public safety LTE, nice synergies here. And Kelly Mark's organization drives and pursues monetizing both Managed & Support Services off of that \$10 billion addressable market in land-mobile radio and LTE. It's important to note that the \$6 billion addressable market for services is mainly around LMR and LTE and doesn't really yet capture the services opportunity for the command center and video surveillance and analytics.

So, I would conclude, and I'll be back up at the end with Gino. Our business is strong, I would say, it's very strong. We continue to grow organically. It's a significantly large addressable market. And the revenues that we're generating are more and more recurring and sticky. We really want to have this installed base of platforms be a flywheel. More cash

generation, more operating margin expansion, more capital to deploy organically and inorganically, so we can improve our penetration and continue to grow.

So, finally, I would say, me and my team, we're driving toward 8 and 8 in 2020. Approximately \$8 billion in revenue and \$8 plus in earnings per share in 2020 requires a lot of execution, but the market is clearly there, the platform is there, the backlog puts us in an exceptionally well position to achieve and pursue. So, this afternoon, you'll hear from a variety of different leaders about why they feel good about their respective areas and how they're going to grow their respective areas for the totality of the business.

So, with that, I'd like to introduce Bruce Brda, but before he comes up, show you a more current video on Prince George's County. Thanks.

**[Video Presentation]**

**Bruce Brda, Executive Vice President, Products & Solutions, Motorola Solutions, Inc.**

Good afternoon. Over the next 30 minutes or so I'll take you through our portfolio, our investment philosophy, Land Mobile Radio, LTE. And then I'll invite Andrew Sinclair to come up and help me with – double click into our Software business. You heard Greg talk about our platform Land Mobile Radio as the platform. Honestly, we couldn't have done a better job of describing that than the Prince George's County video. You saw a police and fire using our Land Mobile Radio.

You saw 911 call-taking, CAD, records, console, all with a high-tier support wrapper. That's what Greg means when he says using our LMR install base as a catalyst to grow beyond. Perfect example.

Before I get started, I'd like to maybe just spend one minute, for those of you who aren't familiar with Land Mobile Radio, and define what we mean by that. There's really three technologies, or technology categories used around the globe. The first is P25. It's kind of the gold standard, the North America standard. Our brand for that is called ASTRO. You'll hear ASTRO and P25 used synonymously, but it's the gold standard for public safety. Deployed heavily throughout North America and Canada, it is the North America Public Safety standard, but you'll also find P25 in Asia and Latin America.

That technology, because it is such a heavy-duty technology, is almost exclusively used by Public Safety. DIMETRA is our brand for the TETRA technology. TETRA is a European standard, also heavy-duty but definitely lighter weight than P25. It's a mix of both Public Safety and our commercial customers. Although it's predominantly deployed in EMEA, you'll find TETRA used in Asia and Latin America as well.

The third is really a category, we call it professional and commercial radios. The standard that's most dominant in that area is called DMR, but to be honest, it's really a family of standards. These are lighter-weight radios. You'll typically find them deployed in commercial applications, so think of mining, utilities manufacturing, and some very low tier, in hospitality as well as retail.

The point I want to make is in the competitive set, we're the only competitor that provides product in infrastructure and devices in each of the three technologies. It gives us a significant scale advantage. We lead in every technology and we lead in every region of the world, that's why this is such an incredible asset for us.

Four years ago or three years ago, we looked at our business. And given the fact that we have a significant leadership position in Land Mobile Radio, we wanted to gauge, are we getting the leverage we should from our R&D investment? And we compared our leverage to other similarly-positioned industry leaders.

So, think of Cisco against Juniper or Intel against AMD, and what we found is, we didn't enjoy the leverage position that an industry-leader should. And we focused on a journey to really significantly reduce the cost that it takes to develop our R&D – I'm sorry – our LMR platform. Number one; we platformed across technology, electrical circuitry, mechanical circuitry, software applications, design once, and use across the portfolio.

Number two; optimize R&D spend. We collapsed the number of major R&D centers down. We dramatically collapsed a number of labs, which are very capital intensive 35 down to 12, and we increased our use of low cost engineering centers around the globe. We reduced the numbers of SKUs dramatically in product, software and services. This pays dividends big time in engineering, procurement, supply chain, services, basically end-to-end in the company, this delivers an advantage to get rid of the less productive and unprofitable SKUs.

And finally we outsourced the majority of our manufacturing to what I believe is the world's best high mix, low volume contract manufacturer, Sanmina, as Greg mentioned. We also went from six internal distribution centers to four outsource distribution centers.

What this did, is it dramatically reduced our spend to develop the LMR platform that leads the industry. During this time, we rebalanced our R&D spend. In 2014, about 75% of our R&D spend was on Land Mobile Radio, and 25% in LTE, Software and Services.

By 2017, we changed that, 45% of our total R&D now goes to services, Software and Public Safety LTE. During the same time, although we increased our investment in the growth areas, we also improved our leverage dramatically. 2014, we had an R&D leverage ratio of less than 9, we're now over 11.5. So a 30% improvement by really, really trying to leverage the industry leadership position that we have in Land Mobile Radio.

Throughout that period, we've continued to invest in intellectual property. In 2017, we filed 475 patents, we were granted 410 patents. It brings our IP portfolio, our patent portfolio to 4,500 total patents granted with another 1,200 in the pipeline.

Similar to the mix in R&D shift, we've also focused what we pursue in a different way. In 2014, we were roughly two-thirds of our patent pursues. We're in the area of LMR and one-third in Services, Software and Public Safety LTE. By 2017, we've essentially flipped that.

So, we're investing more and more of our future intellectual property investments into our growth areas for the business. We have by far the industry-leading patent portfolio in LMR, so there's not a risk there, but there's a huge opportunity for us to protect our future, and we're doing exactly that.

So, let me switch gears for a second and talk about Land Mobile Radio for a moment. In the case of Land Mobile Radio from 2014 to 2017, our devices volume and ASPs were rock solid. They barely moved. Our flagship P25 device, the APX 8000, is the most successful device we've ever launched.

This is evidence of the strong demand that we continue to receive for Land Mobile Radio around the globe. So, why do people continue to invest in mission-critical LMR? First and foremost, it's the best technology at the job it does, delivering mission-critical voice.

The best example of that, quite honestly, is the impact from Hurricane Harvey, Irma and Maria in the fall of this year. Immediately after the hurricane in the areas most heavily hit by the hurricane, the only communication systems that were available for first responders were Motorola LMR communication systems.

Effectively the cellular networks were off the air. That's why people buy our stuff. It's incredibly redundant in nature at the core site and devices level. We build capacity where the citizens need to be served, not where there's a business case that a carrier can use to generate a positive return. We build capacity for the worst day, think of Irma, not a typical busy hour.

And finally, we have a level of control who has access to the system, at what time, and with what priority that can't be matched by any technology. That's why people continue to buy LMR again. It's the best technology for the job that it does delivering mission-critical voice.

We continue to invest in Land Mobile Radio to drive our leadership position number one, but maybe more importantly to ensure that our customers continue to refresh their devices or even accelerate that refresh rate. First thing is voice as an

interface. So, think of simple voice commands that control the radio, change channel, volume up, volume down, but more importantly voice queries leveraging the Land Mobile Radio network back into the command center.

This is kind of like Alexa for public safety, if you will. But what we do is teach the system how to understand police lingo. I think the example you saw, if you were able to see the demo in the hallway before, is a great example of the way that we have trained this system to know what a police officer says and what to expect next.

Cloud-based solutions to simplify deployment and software upgrades. Simplified configuration, we just recently launched a compact TETRA system called DIMETRA Express that literally can go from in the box to operational in 15 minutes. It's this kind of simplification that drives our business.

Better basics. It's about size. It's about battery life audio and user interface on our devices. It's about size, power consumption and serviceability for our infrastructure. And finally from a security perspective, over the last 18 months, we've brought on a team of secure cybersecurity experts who are working to harden all of our solutions; hardware, software, and services solutions. This is becoming a significant competitive differentiator for us.

The last thing that I'll say is everything we do from an R&D perspective is built to enable Kelly Mark's, Managed and Support Services business. We have to build in the ability for him to remotely control, remotely manage and do so in a cost-effective way. So, I mentioned a moment ago, LMR is the best technology in the world for delivering mission-critical voice.

Similarly, Public Safety LTE is the best at the job it was designed for, which is still delivering large quantities of data. Neither technology can do the other's job, however. This is why we believe they are complementary and that the sales we receive on the Public Safety LTE side will be incremental to our business case.

In the case of LTE, we've invested heavily over the last several years and are positioned for significant growth I believe in this market as it matures. We've built the largest public safety dedicated network, so these are dedicated networks used only by public safety, leveraging dedicated spectrum around the world. We have also taken the application suite that runs on those dedicated networks and enabled that to be delivered as a service on top of carrier networks. That's what we're doing for FirstNet in the United States or ESN in the United Kingdom.

The thing that only we can do because of our LMR footprint is seamless LMR-LTE interoperability. Only we can do that, and quite honestly that is the biggest advantage and differentiator we have in the marketplace. And finally, we have a portfolio of purpose-built devices and deployable networks that are being used by our customers around the globe.

To wrap up this section before I transition into software, we've taken a significant amount of energy to drive down our spend in Land Mobile Radio, and develop a level of leverage that we had not received in the past. We now have the leverage consistent with an industry leader. That's allowed us to invest more heavily in Public Safety LTE, Software and Services.

We're continuing to drive our Land Mobile Radio leadership to accelerate replacement rates and continue to refresh the networks that are in the field. I believe we'll maintain the leadership position we have there. But maybe most importantly, we're developing LMR as a platform to enable those growth businesses to ride on top.

With that, I'll transition into Software. I'll kick this off with just a couple of slides, and I'll ask Andrew Sinclair to come up in just a moment. So, the command center software market is about a \$5 billion market globally, about \$3 billion of that is in the United States. Our revenue is quite small in that area, so this gives us a significant opportunity for growth.

Why now? I think is really a question that a number of people asked me before we started. And I want to maybe talk about the transition of Public Safety Answering Points or PSAPs in the United States. When PSAPs were deployed, it was quite simple. A landline 911 call came in into a command center and there was an LMR voice played out to a first responder, quite simple.

What's happened with the development of mobile phones, now, a mobile phone can provide rich content. It can provide texts, it can provide images, it can provide video into a command center. Also, body-worn video and city-safety video is being piped into command centers, gunshot detection piped into command centers, as well as sensors from safe city and smart city deployments around the world. So, lot of information coming into a command center. Additionally, you now have, not only a Land Mobile Radio voice pass out to an end user, you have a broadband pass out to an end user as well.

So, the regulatory changes around NextGen 9-1-1 and the environmental changes in the other areas have basically caused all of the applications in a public safety command center to be revamped to handle this complexity. That's why the timing is right. There's a significant inflection point and I think we've really timed the market right to enjoy that.

Building a software business requires that we invest, invest in three areas. Number one is talent. We've brought in significant talent from the software industry from startups as well as through some of the acquisitions we've done. Second is in skillset. We've acquired skills in cloud, in AI, and in user experience, and we're building our design centers in areas where software talent is readily available, Seattle, Salt Lake City, Bangalore and Krakow are our primary software design centers.

And then, finally we've built a dedicated software sales organization to work hand-in-hand with the LMR sellers, but to bring this portfolio to market. A big part of the talent that I mentioned was bringing on Andrew Sinclair. Andrew joined from Microsoft about 11 months ago and I'd like to invite Andrew to come on up on stage.

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**Andrew Sinclair, Corporate Vice President, Software Enterprise, Motorola Solutions, Inc.**

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Good afternoon. I'm Andrew. I was not here at the last FAM meeting, so it's probably worth me saying a few words about who I am and more importantly, why I came to Motorola Solutions. So, I spent the last seven years at Skype. I was at Skype via Silver Lake. So, I went there to help transform Skype into the business that it became. So, Skype, of course, was eventually sold to Microsoft for about \$8.5 billion.

Prior to Skype, I was at Microsoft. There's an obvious joke in there. So, I was at Microsoft, and I was one of the founders of Lync. Lync is now called Skype for Business. At the time, almost 10 years ago, we were looking at the telephony industry and what we saw was big hardware being rolled into people's data centers – compute, networking, storage. And we looked at what people were doing. They were focusing on the 101 features of the PBX and the ugly phones on the desk. And we concluded that is what they really needed was a cloud-based communication system integrated with workflow.

That's what we're doing in Motorola Solutions. We are a communications system and we are looking at how we integrate that into the workflow that Bruce talked about earlier. And that's really why I came to Motorola Solutions. It's a great opportunity for us to drive digital transformation in public safety. It's different to the enterprise. Its public safety-specific, but the principles are the same and the opportunity is the same.

Before I talk about that, let me first ground you in what the command center is. We've talked a lot about it this morning – this afternoon, sorry, but it's worth telling you exactly what it is, laying out the chalk on the field. It starts with 9-1-1 call handling. This is literally a call center. This is the stressed citizen calling in with an incident happening. They're seeing a burglary happening, they're being assaulted or whatever. And they will talk to a 9-1-1 call handler who will take down information. That information is then passed over to the dispatch operator, computer-aided dispatch.

This is the individual who is responsible for managing the incident. They will work with first responders to make sure all the right resources are there, to make sure they have backup, to make sure they know what they're walking into. This, of course, is all enabled by our communications system, by land mobile radio, and by our broadband systems, keeping them communicating and keeping them in touch.

Behind the scenes, we have record analysts and real-time analysts. They're looking at all of the situational data, prior criminal activity, location information, number plate lookup. And when we look at real-time crime centers like the one we've recently deployed in New Orleans, they're looking at street video, seeing what's happening on the ground. This is

what we mean when we say the public safety ERP. This is what we're building. This is what they have today. This is not that sexy picture I just presented.

We have an individual here sitting in front of a whole bunch of screens. He's got a screen on the right-hand side. That's the dispatch console. That's how they can manage the radio system. There's a map over here. They have a CAD system there, they're doing queries through records system. And the most shocking thing about this picture is this here. He's got a pen, ecstatic. He's got pen and paper. He has a pen and paper that he's using to transfer information from one screen to the other.

It is literally swivel-chair integration. Looks at information on one screen, writes it on a piece of paper, turns to the other screen and types it in. Information is lost. Time is lost. And during critical incidents, the safety of the first responder and the safety of the public is dependent on this individual's ability to deal with complexity. And the reality is, point products that are not integrated do not work well together.

Bruce has already mentioned that over the last few years, Motorola has invested heavily in building the entire public safety portfolio, the entire suite of products required to do this.

Today, Motorola is the only company with a complete portfolio of public safety products. It's worth pausing and saying that again, we are the only company with a solution or a set of solutions that go everywhere from 9-1-1 call handling through incident management all the way through analytics and even evidence management systems for the prosecution phase. We are the only company with a complete solution.

So, why is that important? Well, there are over 6,000 PSAPs in the United States today. We're in only half of them. We have a solution in almost half of all those 6,000-plus PSAPs today. State of Massachusetts is an example, 250 PSAPs are in 911 solution, CallWorks is in every single one of those PSAPs today.

Across the rest of the country, we have CAD solutions deployed. Prince George, you saw the video earlier. Indianapolis, Virginia Beach deployed this morning. We have record systems deployed. We have our analysts – video analytic systems deployed. Every one of these deployments gives us the ability to land and expand, the ability to sell one product and then come back and sell the others and fill out the entire suite. Which means the growth of our business is based on our ability to sell the entire suite to an agency and the ability to capture more and more agencies as we go across the rest of the country, ability to grow horizontally, ability to grow more agencies.

It's no longer about software devices infrastructure. It's about complete solutions, complete end-to-end solutions, involving all of those components. And as we build on this, we add analytics, we add machine learning, and we add AI to build more solutions on top of that.

Our fully integrated suite looks like this. If you haven't seen it in the pods outside, I suggest you go out. Dan and Lexi will walk you through this. But let me walk through the scenario here. Imagine a citizen with – imagine a citizen is witnessing a crime happening. They take a picture. They upload that picture to 911 using the NG9-1-1 system. That picture is then automatically saved into our data platform, automatically available in records across the system. It's now available to the CAD operator in the middle. The CAD operator can send that picture to the mobile phone for the first responders in the vicinity, and they can then apprehend this suspect quickly.

It's no longer a description of a tall white guy with brown hair. It's a picture of that guy. So, they can see them, and they can apprehend when available. It's about driving the right outcomes at every stage of the workflow. And right outcomes are driven by having seamlessly integrated systems with information flowing through every stage of the workflow. Information that we can build on, information that we can add additional services through technologies such as ML and analytics so that we can start preventing crime before it even happens.

And we're doing this today. Our mapping solutions, today, at the beginning of a shift, the shift officer will literally tear off a piece of paper and hand it over to the officer or the first responders. They'll take that piece of paper, they'll fold it up, and they'll stick in the binder. With our real-time mapping system, he can update that map and push it to their mobile devices in real time as the situation changes on the ground.

We can also provide predictive mapping, so that we can tell the officers where crime is likely to happen, so they can be deployed, stopping it. So if we know that there's a game on, you should put officers in these areas because in the past incidents have happened, you can prevent that crime from happening.

We've talked a lot about video. Today there is video-body worn, street cameras, even video coming from citizens with their mobile phones being uploaded. What that requires is somebody to go through that video and analyze it, somebody to look at it literally frame-by-frame identifying people. With the solutions we've deployed in New Orleans, it's a great example, where we've deployed video analytics. It's as simple as finding all of the pictures of your daughter on your Mac. You simply find her picture, click on her face and the software does the rest, even puts it into its own folder and shows you a map showing where she's been. That's the software that we're deploying.

And we're building virtual agents. Public safety agents or as Bruce said earlier, Alexa for public safety, handling simple queries that don't need a dispatcher such as look up a number plate, tell me when my backup is arriving, tell me where the nearest officer is, et cetera.

So, let me change gears a little bit from what we're building to what we've done so far. We formed the software business 10 months ago in March of last year. Since then, we spent a lot of time working with Silver Lake, analyzing the business, analyzing our organization and we've made a lot of changes.

We've moved from a collection of acquisitions to a very product-centric organization. We've moved from nine layers of management down to four layers of management, so we have greater accountability. We've either replaced or put into new roles 80% of my leadership team, completely changed that out. Drawing in people from places like Microsoft other than me, Bing the machine learning and in our acquisitions such as Kodiak and Emergency CallWorks.

We've gone from 150 distinct titles in engineering to 6, and we've brought the best practices of the software industry into Motorola Solutions, moving to a real agile process, creating a dedicated cloud-based system so that we can accelerate our move into the cloud, picking the right technologies there. And we've moved the organization to start focusing on building integrations, creating the red thread that stitched this all together and create an integrated suite.

A very familiar game plan, referring to what I said at the beginning, start moving everybody into the cloud build-a-suite. Our plan – this isn't just a vision – as we invest, customers are buying into this plan. They are starting to bundle today. I'll give you an example. A county in California, 100,000 people, 300 calls per day. They bought our 911, our PremierOne CAD solution, our PremierOne Records solution, and our radio system. One provider, an integrated system, radio, 911, incident management and records, all in one, buying it all together.

Last year, our customers bought point solutions. This year, they've already started bundling those solutions together before we've even finished stitching it all together. Next year, they're going to buy suites, suites that grow with them, suites that evolved with their needs and that they can deploy on-premises, in the private cloud or in the public cloud.

We are at an inflection point. We are the only company with a complete portfolio. We are driving change from point solutions or point products that don't work together to an integrated suite. And we are the trusted partner. We have over 90 years of experience in public safety. We have earned permission to take our work with our customers and move them to suites and to the cloud. We have the assets, the experience, and the opportunity to drive digital transformation. Thank you.

And with that, I'm going to ask Bruce to come back on stage and we'll answer questions.

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**Bruce Brda, Executive Vice President, Products & Solutions, Motorola Solutions, Inc.**

So I think we've got a couple of people with microphones on the sides for anybody who has questions. There's one in the front and one a couple rows back in the middle.

## **QUESTION AND ANSWER SECTION**

**<Q>**: Thanks. For the video analytics piece, is that something that you're going to develop internally, just use off the shelf stuff or acquisitions? How do you – because it seems like for pieces of the puzzle, probably the more complex one...

**<A – Andrew Sinclair – Motorola Solutions, Inc.>**: ...yeah.

**<Q>**: ...also that something that could probably have applicability beyond just public safety.

**<A – Andrew Sinclair – Motorola Solutions, Inc.>**: Absolutely. So the answer is actually all three. So as we build the video analytics pieces and we are looking for the best solutions possible. So we are building some of our own. We have integrated with partners. New Orleans is a great example where in addition to our own technology, we've integrated a third-party. And as and when the Avigilon deal closes, there's a great video analytics asset that they push both to the edge with the cameras and also in their data centers that we can leverage there. So we will integrate all of these together, so that we get the best of class solutions there.

**<Q>**: [Question Inaudible]

**<A – Andrew Sinclair – Motorola Solutions, Inc.>**: So these are both real-time and after-the-fact analytics. It is important particularly when you're doing things like facial recognition to be able to do it in real time. That's used a lot for finding out who did it. But if you're trying to track somebody down Bourbon Street, it's critical that you can do it in real time and see them.

**<Q>**: [Question Inaudible]

**<A – Bruce Brda – Motorola Solutions, Inc.>**: Why don't you repeat the question just so that...

**<A – Andrew Sinclair – Motorola Solutions, Inc.>**: Yeah. Sorry, we don't have the mic. So the question was, are we going to be handling the compute or is it the customer? So this is actually a very good question, because it speaks really to the move to the cloud. Today, for the simple analytics, customers are doing it with the compute on-premises. But clearly, as soon as you start handling large volumes of video and large amounts of compute, they need to be in the cloud. Our Vault evidence management solution is cloud-only for precisely that reason, because you need to be able to have access to that on-demand compute as and when you need it rather than stacking masses of servers in your data center.

**<Q>**: Hi. Thanks very much. I guess, I wanted to ask about – I was at the APCO conference in the fall, walking around, I think I saw, gosh, probably 20 new providers of CAD systems and call-taking systems. And I think along the way, you guys acquired three or four of them. It seems like some of that was clearly duplicative. But I guess for me, I want to understand the insertion point, right, I mean, you've got PSAPs that have all kinds of spaghetti in terms of the different software components that they've deployed recently or years ago. How do you kind of take a suite solution and kind of overlay all that? It seems like a difficult sales point?

**<A – Bruce Brda – Motorola Solutions, Inc.>**: Yes. So you're right. The market is incredibly fragmented. Our position, roughly \$400 million you saw out of \$3 billion number for North America and we're the leader now across that suite. So it's a very fragmented space. Each of those sleeves that you saw call-taking, CAD dispatch, typically have been on disparate purchasing cycles. So again, our approach is a land-and-expand approach. Why do we believe it will work?

Roughly two years ago, we used outside third-party to do some primary research with all of the PSAP buyers. And effectively, the complexity is increasing at a rate where they can no longer keep up and integrate on their own. So the demand for suite is absolutely increasing. I think maybe the top 10 cities in the U.S. have a significant enough IT force that they'll do this work themselves going forward. But everybody else, I think more and more is going to migrate to a suite.

In terms of how you navigate those disparate purchase cycles though, it is exactly what Andrew said, it's a land and expand and we've seen that. The example I point out, emergency call works and Spillman, both served the Tier 2, Tier 3

for call taking and CAD, respectively. Jack's team has done an incredible job of cross-selling across those two platforms. So that's a case where we don't in the case of Spillman and ECW have full integration yet. We've got some light integration points, but the fact that we're there and we're trusted has opened the door instantly to enable us to sell additional applications in the suite.

**<Q – Keith Housum – Northcoast Research Partners LLC>:** Good afternoon. Keith Housum from Northcoast Research. As we look at the command center product, is this primarily a U.S. focused product or is that product that you guys can take around the world? Is the rest of the world ready for the same products that that the U.S. is? And then finally, how much does the expansion of LTE or FirstNet, how important is that to the expansion of the product portfolio here?

**<A – Andrew Sinclair – Motorola Solutions, Inc.>:** I'll take the first, you take the second.

**<A – Bruce Brda – Motorola Solutions, Inc.>:** You take the first part.

**<A – Andrew Sinclair – Motorola Solutions, Inc.>:** I'll take the first. So as Bruce said it's about a \$400 million business today, and that is primarily in North America. However, we are seeing expansion globally. We have P1 deployments in Australia, for instance. In the UK, we are doing very well with our record system Pronto and the integration there. And we're seeing increasing demand across the globe, because the problems are the same. They have localized variations, but not much, in all honesty, and we are seeing greater and greater expansion. There's really a function of our ability to start expanding into those countries.

**<A – Bruce Brda – Motorola Solutions, Inc.>:** Yeah. With respect FirstNet, I'm not sure it's going to have a major impact on what we're referring to. You saw in the red thread example a mobile device. Today, every police car has a connected laptop, and most officers carry a consumer-grade device with a normal carrier connection to it. So the important part is to have our applications loaded on whatever's on the edge. As those devices work in more of a mission-critical role, they'll tend to be more purpose-built like we provide. If consumer grade is good enough, it can be a third-party. But our application suite can be monetized and mobilized on any hardware that exists in the vehicle or in the officers' hands.

**<Q>:** Woo Jin Ho from Bloomberg Intelligence. So if you're making the analog that you guys are selling the suite and it's analogous to ERP from way back when. Could you just talk a little bit more about the customer readiness going from legacy systems to the suite-based, cloud-based systems? And then to follow on and make segue to the next segment, do you need to bolt-on a larger managed services force to transfer them over to these cloud-based systems that do you need?

**<A – Andrew Sinclair – Motorola Solutions, Inc.>:** Yeah. That's a good question. So the question, just to summarize is, is our customer base ready to move to a suite and then eventually to move to the cloud? And the answer is, it depends. We are seeing a bunch, a number of customers who actually asking us today. As I said earlier, we're seeing customers bundling, typically a customer will buy Records and CAD together. Last year, we saw a movement for them buying 9-1-1 and CAD together. So they're starting to bundle now and they're asking for these suites. The most important thing they're asking for though is that integration between the products, as I say, the red thread stitching it all together so that information flows. So they're asking for that.

The second part of that question is are they ready for the cloud? This is very analogous to actually the work I did for the last 10, 15 years moving telephony from on-premises into the cloud. There will be some early adopters. We're already having customers come to us and say, well, why can't you run this for us now, Kelly. We're already actually running systems for some customers and Kelly can talk about that later. And we are getting customers saying, no, this should be running the cloud for us.

We are also seeing some customers, just as they did with telephony 10, 15 years ago, saying it will never move. It will move. It will just take time for all of them to see that. They're going to have to see it work for other customers. They're going to have to see the benefit. And then you start to get into scenarios such as the first question is, if they want these

higher end capabilities, if they want video analytics, if they want machine learning to start helping them plan their policing for them, they're going to need the compute power of the cloud to do that. They're not going to run that on premises.

**<A – Bruce Brda – Motorola Solutions, Inc.>:** Without question though this creates an opportunity for Managed Services and Kelly will talk about that in a little bit. It will be difficult to separate. I think software we deliver as a service from the Services business itself, I think those two things are going to blur and more and more often you're going to see customers asking us to host and run applications for them. Kelly will have an example when he talks after the break that highlights exactly that where we've taken a traditional Land Mobile Radio Managed service and now have built up into command center applications hosted at the same site.

**<Q>:** You just touched on the willingness to move, but I guess I'm curious about the ability. What would be the difference in price between the point solutions and your end-to-end? I assume yours is much more high end? And what's the funding environment like across North America more broadly?

**<A – Bruce Brda – Motorola Solutions, Inc.>:** Let me try that. Today, customers buy all of those applications. That spend is there. The move to NextGen 9-1-1 is a regulatory push, but environmentally all of those changes are forcing customers to upgrade. But the spend is already there. I think we have a position with the suite. We can deliver a more effective solution. And honestly, we can deliver a lower-cost solution because we're operating as a suite.

Today, with individual on-prem deployments, there's a lot of hardware and a lot of complexity in the system integration with each of those jobs. Once we get to the fully integrated suite, it's one project for us, and we can activate different applications at the right sales cycle. The example I would give is Salesforce.com where they'll sell you an application and quickly try to upsell to the second, the third and the fourth application in that suite. So, this isn't a matter of does it need to be funded? It's already funded.

**<Q>:** Yeah. Just hoping that you can walk us through how difficult it is to rip out the legacy systems and upgrade and, kind of, the timeframe and labor behind that?

**<A – Bruce Brda – Motorola Solutions, Inc.>:** I'll talk about the time frames. They differ by element in the command center. 911 call-taking typically has a five- to seven-year refresh. CADs are typically 10 to 12. But people today do a rip-and-replace cycle. That's the normal routine that they go through today.

**<A – Andrew Sinclair – Motorola Solutions, Inc.>:** Yeah.

**<A – Bruce Brda – Motorola Solutions, Inc.>:** I think the challenge for us is to make that much less disruptive than it is today. And again, the platforming approach is how we intend to do that. Again, one project, one deployment, and then have the ability to upsell. I'm not sure if you'd add.

**<A – Andrew Sinclair – Motorola Solutions, Inc.>:** No, I was going to say exactly the same thing. Just to add to that, though, the next upgrade should be the last upgrade they ever do. They should be – we'll come in, and we'll rip and replace the legacy system, systems that were developed 10 years ago, and replace them with our platform. At that point it becomes very sticky, and we're just upgrading versions doing that. We're in a modern software world now, no downtime, continuous upgrade, continuous movement forward. So, these solutions as we move into the platform space become sticky. And the thing really is, it's the last upgrade they'll ever do.

**<Q>:** Can you talk about the go-forward acquisition plans? Are there still skillsets or applications that you need for a division or geographic expansion?

**<A – Bruce Brda – Motorola Solutions, Inc.>:** Yes. So, you saw, we've completed the portfolio from left to right and top to bottom. So, in North America, to serve that market, I believe we have all the assets. I'd never say never in terms of an acquisition, but it's not to fill a gap. As you go outside of North America, this model fits where public safety follows a North America policing model.

But then Australia would be an example of that where our tool set works very well. We do have to fill holes outside of that, and whether it's organic or inorganic, I don't think we have an answer to that yet, but that is – Andrew's goal this year is to get a couple of key reference customers in all of the regions around the globe so that we can continue to build on top of that, and we've got a plan, a very focused plan on how to enter in Latin America, in EMEA and in Asia, for example.

All of those places we have products deployed already, but we need to accelerate the growth there. The majority of this business is North America-based today.

<Q>: [Question Inaudible]

<A – Bruce Brda – Motorola Solutions, Inc.>: Yeah. The question was, is this spend local, municipality level where – it kind of depends on the country. North America is very fragmented. There are 6,400 PSAPs, over 6,000 PSAP. The spend is at that level. Many of the agencies on their own, group up, Andrew said all of Massachusetts – I forget the exact number of PSAPs.

<A – Andrew Sinclair – Motorola Solutions, Inc.>: 250.

<A – Bruce Brda – Motorola Solutions, Inc.>: 250. They've decided to join forces. And when you leave the United States, it tends to be much more country-based decisions. So, the decisions there are bigger and more impactful, in the United States there's far more decisions and they're smaller in nature.

<Q – Paul Coster – JPMorgan Securities LLC>: Paul Coster from JPMorgan. A few quick questions about the go-to-market. It sounds like this is a high-touch enterprise sale. I imagine it's a direct sale. Can you leverage your existing sales force for your traditional products.

<A – Bruce Brda – Motorola Solutions, Inc.>: Yeah.

<Q – Paul Coster – JPMorgan Securities LLC>: And is there a channel that you can leverage as well going after this?

<A – Andrew Sinclair – Motorola Solutions, Inc.>: So, we actually do leverage our existing team. So, there is an overlay sales team dedicated to software sales, but it is an overlay team and we very much leverage Jack's Fast team, as they're called, to take all of this to market. And there's a lot of synergy. We often see sales that are Radio plus. A lot of that command center solutions because of the integration that's put there, and that'll only get stronger and stronger.

<A – Bruce Brda – Motorola Solutions, Inc.>: And from a channel perspective, I won't steal Jack's thunder, but he's gone through a rework of the channel partners to help bring our channel partners along the journey we're on as we evolve our business. So, today, it's predominantly a direct sale model. I'll let Jack comment when he comes up a little bit, if he thinks that the channel will be appropriately skilled for these kind of sales in the future. Okay.

<Q – Matt Cabral – Goldman Sachs & Co. LLC>: Matt Cabral from Goldman Sachs. Andrew, a question for you. You talked about earlier how you have a footprint and about half of the PSAPs that are out there. Can you talk a little bit more about how many of those today are buying more than one of your products? And as we think about rolling that forward, I don't know, three, five years out, just if there's a target of where you think that penetration can ultimately get to?

<A – Andrew Sinclair – Motorola Solutions, Inc.>: So, as I said, we're in about 50%, roughly, of those 6,000 plus PSAPs. Typically what we see is, they'll buy into 9-1-1 solution by itself. They will typically buy our CAD and records at the same time. I don't actually have the number, but we can get you the number too. Because what we've seen though in the last year and really second half of last year, we saw people starting to buy our low-end Flex and CAD and 9-1-1 solutions together which means we can leverage. And it is our belief that because we're at 50%, we can actually grow significantly in our footprint there.

<A – Bruce Brda – Motorola Solutions, Inc.>: We've got a handful of large city examples, I would say, where we've done a pretty effective job at penetrating with the entire suite, Indianapolis and New Orleans. I think you mentioned New Orleans, Indianapolis would be another, where they've, kind of, bought into this model and the integration points and see

value in that and they've adopted more. Clearly, that's the goal, it's land and expand, if we have a presence in 50% today, it's to sell the whole suite to those 50% and then go after the remaining 50%. But it tends to be one application in the majority of those, but we have plenty of examples where it's the whole suite.

All right. I think with that, we'll move to a 10 minute break. Thank you very much.

**[Break]**

**Announcer:**

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Ladies and gentlemen, Kelly Mark. Senior Vice President, Managed and Support Services.

**Kelly Mark, Senior Vice President, Managed & Support Services, Motorola Solutions, Inc.**

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Good afternoon. I'm Kelly Mark. I'm responsible for our Managed and Support Services business. I'm here to give you an update on the strategy for that business along with the \$6-billion market that we serve in that business.

Three things I'm going to talk to you about today. First, I'm going to talk to you about the status of the business, what it is, and what we've done since we last met. The second thing I'll talk to you about is where we're going with that business and why our customers buy from us. And then I'll close out talking what we're doing in the strategy to execute 2018 and beyond.

So, just to level set first off. When we talk services, typically you hear us articulate that and we talk on earnings. It's a \$2.6-billion business for us. There's two components to that business. First, there's an \$800 million integration or what we call SI business. That's the part of services that we operate that goes in, installs the networks, and gets the networks up and running for our customers. What I'm here to talk to you about today is the \$1.8 billion in Managed and Support Services which is everything we do on services once the network's up and running from day one and beyond. That's the part of the business. And we think about Managed and Support Services, it's everything from the most basic break-fix tech support, come out fix the system to the most complex managed service where we operate communications as an outcome.

As we look at that business, we deliver it through the footprint you see here on the screen, which are a set of call centers, network operation centers, and locations where our field personnel can reach any system we have across the globe. There's three things I'd like to note about this footprint that you see here. First off, other than Airwave and Interexport, which we acquired, this footprint is virtually the exact same footprint of operation centers that we had when we met you in 2015. So, we've been able to almost double the number of managed customers we have operating underneath the same footprint.

The second thing I would tell you is as I look at this footprint, it doesn't need to expand. Now, some of the footprint is driven based on our customers who require that we have data sovereignty within their location. So, sometimes we win a customer and we sell them a system, they'll say we want to make sure there's an operation center in our country, the data's got to stay within our country. That may drive that. But other than that, this footprint is the footprint that we will leverage as we grow our business and continue to expand the number of managed service customers that we have.

The third thing I'd tell you about this is we run this off a common platform now. In 2015 when we started to really focus on our managed services business and dig into it, we operated underneath different software platforms and different procedures. Now, we've implemented a common software platform across it, operating underneath common ITIL processes, which is a standard in the services industry.

If we look then how the business has performed since February 2015, it's been a business that's grown inorganically and organically for us, revenue going from \$1.1 billion to \$1.8 billion. Backlog has nearly doubled, gross margin improvement

by 400 basis points, and most importantly, the annual recurring revenue as we look at it in the Managed and Support Services business has gone from 18% to 28%.

The way we've driven that is based on two major areas. The first one is inorganic. Many of you know you heard us talk about, the acquisition platforms that we've acquired in the form of Airwave and Interexport. Both of those companies provide the mission-critical communications to all first responders in their respective countries. UK for Airwave. Chile we reference it kind of as a mini Airwave, but Interexport does the same thing Airwave does. They do that for Chile.

Those are acquisition platforms, and I use the word platforms very specifically because we plan on leveraging those and are leveraging those not just for mission-critical communications, but also adding in command centers, the software that Andrew is talking about, and ultimately, the integration with data as well in the form of LTE.

The second thing that we've done organically to help drive this business is we've continued to push the penetration of our services with our existing customers. The best opportunity we have to grow our services business is going to the customers we currently serve and continue to drive penetration of things like security monitoring, system upgrades, adding additional services, moving them to Managed. That's been a big component of driving the organic growth around the business.

The other thing we've done is we've launched new services in new areas. We didn't have services on our low-to-mid-tier radios, we've added that. We didn't offer services around device management for our customers, we've added that. We didn't have services in LTE or wave or some of the software platforms we have, we've added that. That gives us a level of open field running and new revenue streams that we can continue to drive.

The third thing we've done is we've made investments in the portfolio. We've drastically simplified it. If you looked at our portfolio or our website back in 2015, it would have been a collage of services, hundreds of point services that we sold to our customers. It was a menu of services they could come in and pick on.

Now, what we've done is we've structured around frankly three simple packages. We call it, essential, advanced and premier. Go to our website, you can see the lineup and what they mean, essential being the most basic level of service, moving into advanced, which provides the level of network monitoring and remote repair of an issue, and ultimately, premier which is our full-blown managed service.

This enhances the value proposition for our customers. So, it's much more clear in regards to what they buy, and it helps simplify the selling process for our sales team as they engage the customer. We talk about those packages. Ultimately, what we do when we sell services is we move customers through the journey. A lot of customers started years ago being self-maintained. That's the customer stand-alone. They manage their systems. Then they begin to buy the essential services for us the break fix the basic tech support and on-site they do.

As they advance in that journey, they move into being an advanced customer, now buying monitoring such that we're constantly monitoring the systems as was referenced by Princeton, such that any issue comes up, we could take care of it. And ultimately, they move into becoming a managed customer or a customer who's buying a full blown as-a-service delivery from us where we come and do it for them turnkey.

The reason customers buy from us is any number of reasons. As we look at the environment today, the technology – we all know technology is advancing at an ever rapid pace. It's also, as Andrew talked about in his section, there's an increasing amount of technology they have to deal with. They'll come to us, to look to us and say integrate the technology for us and help manage that pace, that advancement that's going on out there, along with wrapping the security around it. We watch what happened with the WannaCry ransomware attacks that happened last year, that didn't happen to our customers. The reason it didn't is customers who buy the security update service for us, they're always up to date on any patches they need to make sure their system is secure.

And finally, they buy it from us because ultimately, it's what we can provide through the scale and scope of what we have in our platform, it's the ability to do it at a lower TCO than they can buy. So, those are the reasons people buy. But I shift because it's not just about the spreadsheets and the sales approach and the dollars and cents. People buy from us

because of the investments that we make into their systems and their community. They buy from us because, frankly, people on our team who I would reference and call out like Jay Nicks.

Now, most of you are probably wondering who in the hell is Jay Nicks. Well, I'll tell you two things about Jay Nicks since I've gotten to know him. The first thing is that Jay Nicks has a pet donkey named Dan that he uses to chase coyotes. That's a different story for a different time but it's very fascinating when you get to know the guy.

The second and more important thing I'll tell you about Dan is, Dan is a dedicated member of our services team who goes into disasters. He deploys into areas when there's a hurricane, when there's an earthquake or where there's tornados. He and his dedicated team make the call before our customers make the call for them. They're there before, during, and after disasters.

They go into areas like Haiti where the earthquakes were. They deployed on a C-5 Galaxy right alongside the military. They bring a 30-truck convoy that you see here. To go in to help make sure that our operations, our communications always operate at the optimum. They don't just do that. They help clear roads. They volunteer at disaster centers. This is a dedicated team. This is why people buy our services. That is the investment that we make. That is what helps create the stickiness with our customers. Is that type of investment that Jay Nicks and that team does. And while others may – other companies create nice-looking Super Bowl commercials about what they do, we just create happy customers.

Customers that send us letters like this, because they're happy about the services we provide that make sure when they need their communications to run, it does.

Perfect example of that, South Carolina. South Carolina is a customers of ours for a very long time. We've operated their networks since 2001. We are basically the full blown managed service provider to them, and we sell our services to them as a service. We provide the complete mission-critical communications to the constituencies around the state as a service.

When you look at what's happened with that customer over time, it's a perfect example of how we talk about how we engage with the customer, we move them up the service food chain and what they buy from us, and they grow with us. And as you can see, we've virtually doubled the number of sites that we have covering the state. We've tripled the number of agencies who buy from us. We've tripled the number of users who buy from us, and we've added additional services. We now are involved in their dispatch, in their command centers. We're also adding services like CAD as a service which Bruce had referenced would be an example we have.

So, South Carolina is a great example of a customer who starts with a few sites, mission-critical communication, moves into a full blown managed service, and then expands throughout the entire state. And most importantly in the process, we quadrupled our revenue on services not to mention the services or not to mention the products that we sell related to the number of users and devices.

So, as we look forward on Services, and we think about how do we grow it and continue to grow it, moving from 2018 and beyond, there's three things that I would highlight. The first one is, we have to continue to drive the penetration of LMR to our existing customers. We have to look at who buys essential, who buys advance, move them to premier. The opportunity we have is to drive – the biggest opportunity we have is to continue to drive the penetration of our services into customers that we currently serve who buy the major systems.

The second area we will drive growth is, we'll continue to add new services in unserved portions of the Motorola portfolio. I referenced adding services around mid and low-tier radios or adding services on LTE or WAVE or adding services on device management. Those are brand new services that, as those ramp up, provide us the opportunity to accelerate the growth of our Managed & Support Services business.

And as we do that, we'll leverage the footprint and the platforms and the data centers that I had on this chart before. So, as we add CAD as a service or as we add other components of the command center as a service, that will leverage the very same call center, network operation center, and data center footprint that we have as a company, such that we can maximize our leverage of the business.

The third and final thing we have to do is, we have to grow our platforms for delivering as a service, moving from walking to our customers and saying, we could be the mission-critical communications provider to we can be your mission-critical operations provider, bringing it all together between Andrew's portfolio, the communication portfolio, and the data portfolio to help our customers manage that and provide that to them as a service. That is the most important thing we'll have to do as our customers continue to look to reduce their TCO, perhaps purchase from us on CapEx and help us manage their complexity of their operations.

So, key takeaways on the Managed & Support services business. Customers, as we have seen and the growth that we've achieved are leveraging us to help them with the cost and complexity of what they have to deal with.

Our Managed & Support services area is a great area for growth and leverage for us and we will leverage the footprint we have to continue to drive operational efficiencies in that business. And we will continue to drive the growth on the top line of the business, through introducing new services, growing as a service and continue to drive the penetration of that business into our existing customers.

I look forward to answering questions during Q&A. Thank you very much.

**Announcer:** Ladies and gentlemen, Jack Molloy, Executive Vice President, Worldwide Sales & Service.

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**Jack Molloy, Executive Vice President, Worldwide Sales & Services, Motorola Solutions, Inc.**

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So, good afternoon. I think before I get started, maybe a point of orientation or introduction. I know many of you, but I was not here, I didn't have the pleasure of being here in February 2015. I've been leading our go-to market organization since January of 2016 and prior to that, I led our North America, which is really our anchor tenant business in 2014 and 2015. I've been with Motorola, 23 years, it doesn't feel like a day over 40, but it's been a great run and we're really in a better position than I've ever seen in my career right now.

So, let's spend a couple of minutes talking about our go-to market or our sales transformation. There's a lot of things strategically, and there's a lot of things tactically that we've done. But I'd probably draw your attention to really three primary topics. I think the first one is, people and I think we've heard Greg and we've heard the rest of the management team talk a lot about people. But when you're going through a transformation, which in and of itself requires difficult decisions, I think it's all about the people, and four of the five real sales lead, general manager people on my staff are new since the last time we met.

And it's one thing to be new, but I think it's the second thing to be effective. And I think we'll get into the results and you've seen the results we've posted to date. This is a highly effective team, and they're all different, they all operate in different theaters. But I would certainly say we ask really three simple things to them. Number one, drive, grow revenue. Number two, get orders, grow backlog, and I think we've seen that we've done that. And number three, make sure that we do that in a way that continues to look to expand the margin. And we compensate them. Frankly, we've made compensation changes recently that really attack that.

Now, the second thing it relates to these people as I look at the four of them, and I think there's really two things that I would draw in as commonality of each and every one of them. Number one, and this is a little bit of departure from the way I think some of the sales leaders used to be they're data driven.

And number two, and I think they're ruthless as it applies to this, they're very, very execution focused. The second thing is when I had the opportunity, Greg gave me the opportunity to come in here, we looked at the global channels and we looked at – we had a global channels business, and we essentially had a score card mechanism that would look at our channel partners the same way in the Philippines as they would in the United States. And what we've kind of learned is business routes to market the challenges that we faced, the vertical markets that we faced in each and every one of these theaters is really different.

So, we need to – what I felt like we needed to do, and I think our organization felt like was the best move was to decentralize, and really to create autonomy and accountability as it's related to our channel programs, which really draw us to what kind of rebuild this whole thing, and it's really, we have to go to the ground level, and look at this thing from an account segmentation standpoint, which really is what's got us to, I think, better performance in the professional and commercial radios that Bruce talked about.

But also, it made us much better as a direct sales organization. We were always historically very strong in government, not only in North America, but around the world. But, in a lot of respects, we didn't necessarily have the same focus or create the same portfolio leverage to go after the commercial, the heavy industrial. Think of oil manufacturing, T&L in the utility market, and really, we had a lot of opportunity there that I think was untapped.

And so, getting after account segmentation and making sure that our partners went this way, and that we went that way, and we averted what I call eight-legged sales calls, I think that's really been a force multiplier for us.

The last thing is really just making sure we have the right incentive structures and the right alignment. We, as you can tell on the slide here, just a few years ago, we had 1,100 people globally that were on sales incentive plan. And subsequent to that, we've gone through, and obviously everybody in the room is well aware of some of the cost exercises, but we've automated a lot of our back-end work, a lot of our reporting.

Greg talked about our partnership with Silver Lake and know your customer, and some of the things that we've driven through that. We've automated a lot of that, which alleviated the need for a lot of what I would call sales operational support, back-end support, people that were maybe counting and watching as opposed to driving. And when I think about the definition of a worldwide sales force, you would hope that you have more people driving sales. I think we've achieved that as you can see with adding 400 people. And some of those are sales engineers to make sure that when we have that moment of truth with the customer, it's a more enlightened conversation.

Some of those have been really building out an inside sales practice originally here in North America, but now, in Europe. We've got a presence in Australia and parts of Latin America as well, because ultimately that helps us get to more places that we weren't getting to before, but also, gives us a pipeline of strength for the future.

So really, I think about a lot of things we've done, but I would really harness them around, it's people first, it's really been account segmentation and channel transformation, and then lastly, it's making sure that all of those things and all the incentives that we have aligned to make sure we go accomplish our mission.

Kelly, I think showed a very strong chart, as it related to our response for hurricanes, and we've discussed some of these things before. But when I look at this, and I think about the advantage that we have as a company, unrivaled touch points. To me, this slide says a lot of things. It says great, we have 1,500 salespeople, we have 7,500 channel partners. We have customer support centers in five continents. We've been given an unbelievable amount of trust to operate 40 networks globally.

But what this tells me, and the time I've spent at this company and the thing that still makes the hair on the back of my neck stand up is its relationships and its trust. And fundamentally behind all the things that you'll see in here today, people trust us because of the relationships we've built with them. They trust us to execute with the most important thing. It's keeping the world safe. It's keeping the enterprise safe. It's keeping schools safe.

And we talked a little bit about 2017, and Greg talked about something that was really – that he had tasked our organization and me with to say Jack, we've done a good job in North America. We've grown North America, as Greg said, three years straight, but we need to return the rest of the world. And I think to me, when I look at this, it's a couple of things, it's execution, but it's also balance. We've got some macroeconomic benefits, I think, but a lot of this particularly I think, and we'll talk about it in a minute, Europe, Middle East and Africa, it's been about execution and about sales execution and channel execution.

It's also been a story, in each of those respective regions of market share gains as well. And I think we always have to look outside and there's one thing to grow, but how are you doing as it relates to your competitive set as well.

So, a few minutes on the verticals and I talked a little bit about earlier around some of the things we've done in the commercial space. But most people typically think of Motorola and they think Motorola Solutions, they think public safety. You do public safety really well. We do. But I think the real opportunity for us, as I said, is we've made Bruce, Andrew, Kelly have made great portfolio service investments, I don't think we were exacting the value out of those investments if we were in the commercial space.

So 2014, we've rebuilt an organization starting in North America focused on utilities and oil and gas, and we had some marked successes early on. Subsequent to that, we've gone and reinvested in the – rather the transportation and logistics space and manufacturing here, we've also invested in teams in Australia and in Western Europe to attack these similar vertical markets.

So, there's a commonality in terms of marketing message, in terms of the business case for each of these respective companies. But I think about a couple key examples is number one, an oil, example, that's great. Just in December, we've got a seven-year agreement from Dow Chemical to manage their infrastructure and devices, and that would be a good story. But the thing that's even more compelling is that's a global agreement with Dow. Seven-year global agreement, multi-facility deal.

The second one, and we were a little nascent frankly in the T&L business, as last year we were awarded five different hubs with UPS in the U.S. One thing to sell them the system and we just heard from Kelly, but we also wrapped services into that deal. We had not been selling services in the courier space prior to that.

So again, I think when you think about it from a customer composition, we've got an unbelievable presence in public safety not only here, but around the world. But we've been able to leverage the investments we made in the portfolio to expand those things into the commercial and heavy industrial verticals.

So, we talked a lot about the things we've done, let's try to marry those things with what's happening in the world today. I think I'll start right here at home, right here in North America, particularly in the U.S. The world fundamentally changed for our first responders, particularly for the police community after Ferguson. In the last few years, everything is on – everything that they do, every decision they make, and they're making split-second decisions, is on video.

And so, that's important, because as I've spent a career on talking to people in law enforcement, they've said to me, hey Jack, you know what? And they joke. They said my partner is important, my gun's secondarily important, but the most important thing in the lifeline for me is that two-way radio so, you better make sure your people or your smart people make that work.

Now, we think about the investment and the acquisition that we've announced with Avigilon and what that does to this community. How do we enable our customers and put them in an environment that's more safe? We just had a tragic loss of a Chicago police commander here two weeks ago, highest ranking official in the CPD since 1981. And really, the way that they quickly solve the case, I mean they literally had the perp cuffed before they knew that unfortunately the officer was on the ground and they feared the worst at that time, but they essentially solved that through video. And we saw the same thing with the Boston Marathon. But there's this convergence of multimedia data wide-area communication, mission-critical communication that Bruce talked about. But how does video play that forward in the future? And that's the thing that we're really excited about, our capability and what we're going to be able to provision for our public safety customers here in the U.S. and abroad. What we do in terms of wide-area comms enable that and couple that with what we're going to do with Avigilon, we're in a very good situation.

You look at the rest of the world, you've got urbanization, you've got some of the most dangerous cities in the world in Latin America. You've got border crises in Europe. Again, how does that couple with us? We're in an enviable position because we provide the Mols, the MoDs, National Police, their systems, their ability to communicate and solve crimes.

So, let's dial into a minute some of the regions. And first of all, we'll talk obviously about the Americas. I've hit on a couple of these points, but I would tell you first and foremost, and this is the thing that's exciting and I think that Andrew and Bruce and I, we talk about. It's sales coverage. We do a lot of benchmarking with other companies and the things we can

think about are we've got this tremendous, as I talked about, relationship and trust in terms of our sales force. How do we continue to move more through that with a very common decision maker, a common buyer? And I think that's a lot of the reason that we've done some of the moves we've made both organically and inorganically because of the trust we have. And Jim Mears, John Zidar and the North American sales force that they lead.

The second thing is, there's some benefit for what we're doing right now around the border spend in defense security. And I would also like to hit upon the APX device portfolio. You all saw those – many of you got a chance to walk through the hallway and really see what some of our wares out there. But the APX device, I think about – I don't want to say any sales have ever been easy, but we walk into meetings where Lucas County, Ohio, was one that comes to mind, and we go in and they'll literally put it and simulate the radio through testing versus EFJ, versus Harris or whoever the competitor might be. They run bypass alarms. They run chainsaws. It was game, set, match for us every time we did. And this radio has been around awhile and it's still the best. And I think it's the best in the industry and we continue to make the investments on Div 1, bringing intrinsically safe radios that we can bring into mines and utility workers and things that they needed. So we continue to kind of distance ourselves there.

The other component of the Americas is really Latin America. We've seen a stabilization from a macroeconomic perspective. And I think the investments that we kept through those times, particularly in places like Argentina and Southern Latin America when business opened up there and other people had vacated Latin America, we were there. And that's been a big reason Latin America has returned to growth as well.

So Europe, Middle East and Africa, as I said. it's been a lot about execution. I will tell you just a couple of years ago frankly, we were getting beat in parts of Europe and the Middle East, and we weren't happy about it. We've made significant restructure in our channel partner. How do we figure out who can get closest to the customer most quickly and how do we win? We've made a lot – as I said we changed the channel programs throughout the world, but the one that I think has paid the biggest dividends has been right here.

The other thing that I think we hit on is historically. we've done business in Europe. And as Bruce said, it's a lot of countrywide decisions, Middle East, very similar. But we haven't really had a lot of success and we didn't really have some of the right focus on Africa. We've pivoted some of that focus to Africa to a great – right now, I would say, it's early days. We had three nationwide wins in 15 months, but that's three more than we had in the previous three years and we've got other opportunities. So, it's a story of building backlog and momentum. But without a doubt, national security, the threat of terrorism and border security is very much front and center for the African nations that we're talking with.

Last but not least, Asia Pac, we've really had a good run and a very good success. You heard Andrew mention, we've had a CAD system in Australia. Australia is very western. They're very western. They're very western in their policing. And they've been very much a good anchor tenant within the Asia Pac region. On any given year, they're number three or number four in terms of Motorola's country in our nationwide sales. But we're starting to get excited about some of the things we're doing and developing Asia as well.

And I think the last thing, which is really a proof point to this whole channel transformation, our sales force transformation, is the vertical partner expansion and it really relates to how we extrapolate data and make decisions on coverage. We had looked at – we had targeted five countries in Asia Pac, 5 of the 32 countries in the region that we were not doing a good job in. And we looked at verticals that we weren't doing a good job on. And in 2017, we signed up 160 vertical-specific retailers or resellers ready to go after those markets in those respective countries. So, I think those bets that we make, those seeds that we place will continue to bear fruit here in the future.

But I guess I would leave you, as we've kind of walk through the takeaways. Number one, I think, as you've seen and as many of you have covered us and followed the company, our reach really, particularly in this industry, is unrivaled. I think, when you couple that with what's happening in the world and in terms of the pressure on the police organizations, not only here but in abroad, but also how you keep campuses safe, how do you keep employees safe. How do you keep students safe and what does that mean as you marry the core business with Avigilon in the future, I think, it puts us in a very enviable position in the market. Our growth drivers continue to look very strong as we move through 2018 and beyond.

And I thank you and I think we're going to take some questions. But I will call Kelly Mark back to the stage for a Q&A.

## QUESTION AND ANSWER SECTION

**<Q – George Notter – Jefferies LLC>**: Hi there. This is George Notter from Jefferies. Question for Kelly. So, you talked about the different services suites you guys have, ESSENTIAL, ADVANCED and, I think, PREMIER.

**<A – Kelly Mark – Motorola Solutions, Inc.>**: PREMIER.

**<Q – George Notter – Jefferies LLC>**: What's the starting point now? Where are you in terms of your existing customer set? How many are at the low end? How many are taking services at all? And kind of where can you go with that in terms of penetration?

**<A – Kelly Mark – Motorola Solutions, Inc.>**: It's a great question, George. I'll start with a just of couple of data points for you. When we look at our installed base of major systems that we can apply services to, roughly 66% of those we have contracts on services – some form of a services contract on those. So we got a full third that we do not have services on. They're customer-owned and maintained. So, obviously, going after that third that is customer-owned and maintained, big opportunity for us. Jack can talk a bit about what we're doing on sales coverage to actually try to address that.

The two thirds that we have services contracts on, we are roughly, what I would call, 50% dollar-penetrated on those. So, even though we have contracts on them, they're buying ESSENTIAL, ADVANCED type of contracts. So that's an opportunity for us. When I talk about the number one area we can grow, which is further penetrating our existing installed base with more services, that's what we – that's what I'm talking about. Right around that.

In regards to exactly measuring customers on who is on ESSENTIAL, who is on ADVANCED, it's actually one of the reasons we went to packages, so we have the data to be able to do that. The process to convert customers into those packages is something that will take some time because a lot of customers are on multi-year contracts. So, they may have bought services which was 10 or 15 services before the way we sold it. As they come up for renewal, we'll walk in, you're an advanced customer, that's the package run. That gives us the opportunity to track and then be able to put specific sales promotions around going out and upselling those customers.

**<Q>**: Thanks. Hey, Jack, could we talk about the PCR business and the channel restructuring? How far along are you in that in the U.S.? And I understand Europe may not be as far along, but are you – what inning of a nine-inning ballgame would you be at? And then, where's the opportunity in terms of growth over, I guess, the next five years in terms of where you think you can get that business to?

**<A – Jack Molloy – Motorola Solutions, Inc.>**: So, good question. Yes, in terms of innings, I'd say we're probably in the sixth inning. We've actually launched and enacted a lot of our changes in Latin America. North America, we've still got some work to do. But Europe, the changes were made 18 months ago, and I think that's why we're starting to bear some fruit on that right now. But I'd say sixth inning.

**<Q – Matt Cabral – Goldman Sachs & Co. LLC>**: Yeah. Thank you. Matt Cabral from Goldman Sachs. Jack, a question for you, this came up a little bit earlier as well, but as we start thinking about the push towards software, the push towards managed services, just from a sales coverage point of view, is this the same sales force that you think is capable of pushing these new initiatives? Is there more investment you need to make? Just curious how that plays out from a tactical point of view.

**<A – Jack Molloy – Motorola Solutions, Inc.>**: Yeah, Matt. So, we want to – there's couple of things. We want to, first of all, take advantage of the scale and footprint, the trust and the relationships through the account management team. It's important to note, and Greg hit on it earlier, but if you just think about our sales force around the world, it's – a third of that is turned over in the last three years. So, we've had some pretty significant turnover in terms of just tenure, retirement, and where we thought we need to get better.

But the second thing, Andrew talked about it, we also look to leverage overlay things for things that are new to make sure that we can speed through that process and make sure that we have the most informed discussion. We've done that. And, Andrew, we have a team like that in the software space. Kelly kind of led the witness a little bit, and I'll walk through the door there.

We're also doing that for that other half of the market in North America that we think needs more focus, more intensity in terms of closing those deals and getting those customers under long-term service and software support agreements as well. So, we've actually stood up a team that looks different. It's really – think about it, Matt, as people who can go sell, it's a return on investment. Do you want to spend these resources yourself or are you better off privatizing those resources with Motorola? That's the kind of discussion that that team has, and they look and feel different than our traditional kind of LMR sales team.

**<A – Kelly Mark – Motorola Solutions, Inc.>**: If you look – I'll just give Jack some props there. I think if you look at what they've done in sales, it's pretty tremendous in regards to the number of sales people who get up every single day now and think about services from the, we call the Hunter team which is out there trying to land those big COAMS.

When I talk about that one-third it doesn't have a contract yet, those are customers which may be quite entrenched in regards to thinking, I can do this myself. Jack has put a team on that. When you think about the expansion and renewal component of that and what we have to drive in that upsell, again, the customers 66% we have contracts on, and we want to now take them and sell more. We've put a team now. We've changed the team out in the field now who's now on sales incentive plans, and their incentive is, when a customer renews, expand them. So, I think it's tremendous. If you look back where we were February 2015, you looked at people who got up every single morning thinking about land, adopt, expand, renew on services, it's been a substantial improvement in what we've seen in Jack's business, and I think it shows in the results.

**<Q – Tavis McCourt – Raymond James & Associates, Inc.>**: One for each of you. Kelly, when you do a complete kind of as-a-service deployment, are you selling devices-as-a-service too? Or does the customer tend to still pay for devices upfront? And if it's as-a-service, how do you price that to make sure you're not losing out in that equation? And then, Jack, for you I guess, from a competitive standpoint when you lose deals, what are typically the reasons that you lose?

**<A – Jack Molloy – Motorola Solutions, Inc.>**: You want to go first?

**<A – Kelly Mark – Motorola Solutions, Inc.>**: Sure. On as-a-service, Tavis, the areas that are most attractive as-a-service for our customers is on the software front and on the infrastructure front, managing, coming in, even providing communications, infrastructures, and service. Devices, I would say, is a third. Most of the time, our customers – not most, majority of the time, large majority of the time our customers still procure devices as a whole. I will tell you that we are open to having the conversations more so than I think we were in the past. If you look back two, three years ago, if the customer wants to come in and, say, hey, we want to pay one fee per user inclusive of you providing the infrastructure and the device, we can do that and we look to do it. We make sure it, obviously, has the same return on invested capital as if they bought it on a CapEx side. So, we have the ability to do it. I would just tell you the most attractive proposition for the customer lies around infrastructure and in Andrew's portfolio in the command center versus device. That would be a third component that we might play to but not usually.

**<A – Jack Molloy – Motorola Solutions, Inc.>**: Tavis, I'd say two things. It's – historically, when we go back, we do post-mortems. It's a flawed – typically, it's a flawed sales person, which leads to a flawed sales strategy. Lot of times people don't realize there's a reason they have two ears and one mouth. It's led us down those paths.

And the second thing, and this is critically important. This is why we put that customer touch points. It's typically a lot of times because potentially, we haven't had the right service provider. And I almost think oftentimes that's more important than a bad sales person there's someone who hasn't given them that post-sale and that kind of lifecycle experience. It's critically important, and that's why we've made these investments. I think that probably that's number one and then the poor sales strategy and poor sales person is number two.

<Q>: You're dealing with something that's inherently a long sales cycle. And I just wonder if as the uptake increases for more sophisticated comprehensive services, if maybe potential customers are making their decisions any more quickly?

<A – Jack Molloy – Motorola Solutions, Inc.>: So, I think we're talking about that other half that we're talking about that haven't been penetrated, but that's a kind of a North America comment. I think – well, a couple of things. I think, since Kelly has brought his organization together a lot of external hires, I think about Glenn Graves and what he's done from a NOC perspective, a commonality of tools, and the support center. Our ability frankly, and I think Kelly would admit it, we probably didn't do a really good job of enabling the sales team with the right messaging when I think 24 months ago. I think where we are now, how we go have that, navigate that discussion, whom we go navigate that discussion with, it might not be the person who's managing the radio network. It's probably a state budget director, a city finance manager.

So, we've made some pretty significant inroads, I would say, in the last two years. And they are – to your point, they are long decision cycles but it feels like to me and it's not the feeling, I think, the data would suggest, those decisions are now accelerating. But clearly, I'm never satisfied and there's half of that population we want to go after. And that's why we've got people who the only way they get compensated by closing and getting those remaining customers under contract.

<A – Jack Molloy – Motorola Solutions, Inc.>: Yeah. One more question. Mic is coming.

<Q>: I apologize if this is an ignorant question. But notable from your presentation was the absence of China and India or possibly also Russia, I can think of a commonality there, but what's happening in those regions particularly in China? And is there a risk that China is developing some domestic standards and will start to bring that out and try to emerge as a competitor at some point in the future? Thank you.

<A – Jack Molloy – Motorola Solutions, Inc.>: Very good questions. So, I'll take number one, China. China is little less approximately 3% of our revenue. The ship sailed. They have already created indigenous standards. We're actually – we planned the way we think about the business this year. We do not plan for China to grow. We do plan for the Asia Pac region to grow. So, we've really – I think, we've – probably the appropriate way as we have hedged expectations as it applies to China.

India, we grew. We grew India in 2017. Russia similar situation. So we've actually performed quite well, but India is a challenging market. Lot of reverse auction in the way they do business. So as much as there's a lot of growth in India, there isn't as much growth directed at public safety and the prioritization of public safety spending as we see in some other markets. But good questions.

<Q>: [Question Inaudible]

<A – Jack Molloy – Motorola Solutions, Inc.>: Do we see the competitive threat from China in the United States? No.

<Q>: [Question Inaudible]

<A – Jack Molloy – Motorola Solutions, Inc.>: We've been competing against, in fact, we have patent infringement lawsuits in place against HYT right now. We never – we certainly never underestimate any competitor, and they've done well. But as I've said, we've taken share back in Europe where we think – in Asia, I think they'll continue. Parts of Asia, they'll continue to be – have a strong presence. But we think we've got the right strategies. And more importantly, Bruce has been very agile in terms of portfolio investment and staying ahead of the curve, and I think that's very critical as well.

<A – Kelly Mark – Motorola Solutions, Inc.>: And I would just – just a component. If you recall, Bruce put up a slide. You have the three components of the radio technologies that we deal in: ASTRO, TETRA, and then the Commercial, sometimes we call that our PCR, professional, commercial radio market. China plays in one of those. They play in the professional, commercial, they being Hytera. But other than, that ASTRO and TETRA, we don't see any companies from those regions that really come into that part of the market.

**Announcer:**

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Ladies and gentlemen. Gino Bonanotte, Executive Vice President and Chief Financial Officer.

**Gino Bonanotte, Executive Vice President & Chief Financial Officer, Motorola Solutions, Inc.**

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Good afternoon. If you'll indulge us for a few more minutes, I have a small set of slides, half a dozen slides, and then I'll join Mr. Brown for Q&A after my slides. And what I'm going to attempt to do here is perhaps put a wrapper around what Bruce and Andrew, and Kelly and Jack have talked about, probably with the exception of the coyote-chasing donkey that Kelly mentioned, I'm not sure where they came from. As we went through kind of the ideas we were going to talk about that never made it until today.

So since we last met, the initial comments that I made the last time I was on stage at a FAM were the focus will be in the future, on driving revenue growth, on diligent cost management and accelerating cash flow. And I'll dimensionalize cash flow a little bit later.

But if we look at growth rate and this is through 2018, contemplating the midpoint of the guidance we gave, services and product have grown, grown obviously at a 6% CAGR through that period. Product has grown through that period at a 2% CAGR. Services has grown 12% driven by Managed and Support Services, 23%. If I exclude the acquisitions, organic Managed and Support Services grew through the period at 6%.

I'll talk about backlog and what we see moving forward. From an OpEx perspective, we're down \$100 million, \$200 million, including the acquisitions. And if I could dimensionalize the \$200 million a little bit, it's a \$130 million in G&A across the board, \$40 million of it is related to pension and retiree healthcare, the rest is real estate, IT, all the functions are all down through that period.

R&D is about \$60 million and selling and marketing is down \$10 million, that shouldn't be interpreted as nothing happened in selling and marketing. Certainly, you saw Jack and the changes he's made in the last couple of years. You should think about that as reinvestment in selling and marketing from a channel perspective, from a coverage perspective, from a Managed and Support Services perspective, and from a software perspective.

Obviously, margin comparable through the period within each segment. The services gross margin is a little bit lower at gross margin, not at operating margin through the period. Focus on cost obviously leads to adjusted EBITDA. Greg mentioned this earlier from 23% in 2015 to 28% in 2018. And EPS growth, the addition of the EBITDA growth and the share repurchase program that I'll dimensionalize in a second, drove 25% CAGR to the midpoint of our guidance at \$6.58. If we remove tax legislation from that number, the tax legislation is included in the 2018 EPS number, it's 23% growth, it's approximately \$0.50 for us from an EPS perspective.

Greg dimensionalized the acquisitions in 2018 Plant and Avigilon, \$350 million in revenue. Additional OpEx, so think about OpEx, we talked about \$1.47B, a \$20 million reduction. And incidentally, the reduction from 2017 to 2018 not including the acquisition increase was all G&A. Much of it pension – reduced pension costs as a result of the injection of \$500 million. EBITDA stays at 28% and GAAP EPS versus guidance does not change in the guidance that we gave. We were contemplating share repurchase. That share repurchase is now redirected to paying for the acquisitions for Avigilon and Plant.

Our cash through the period, up 32% from a \$1 billion to \$1.4 billion. And I think it's important to talk a little bit about the \$1 billion as starting point. For those of you that were in the room in 2015 – 2014, excluding the pension contribution, derisking that we did, we generated about \$650 million in operating cash. That was the first time we were over – the conversion was over 100% versus net earnings.

The year before, we were at about 70% of net earnings. So, and I do think when I mentioned the \$1 billion in 2015, this was February of 2015, there was an audible perhaps snicker in the group on our ability to get to 2015. The only reason I'd say that is the starting point was 158% conversion on net earnings to \$1.4 billion in 2018. The \$1.4 billion excludes \$500

million of pension contribution. The geography of that will show up in operating cash flow, even though we funded that with debt. So, that excludes the \$500 million in pension.

I'm going to spend a little time, you guys – many of you have seen this slide before and spend some time on the capital allocation both in terms of what we've done, what 2018 looks like and what it means going forward. So since we were last here, we have repurchased about \$4.5 billion of shares at \$68.61. If we go back to the inception, Greg mentioned this, but I think it's worth mentioning again, we retired 53% of the float at \$58.58.

Dividend, we've increased the dividend double-digit every year from \$1.36 in 2015 to \$2.08 in 2018. And CapEx, although CapEx didn't change a lot, I want to talk a little bit about CapEx, certainly as it relates to Kelly's business. So in 2015, we've spent about \$175 million on CapEx. A third of that is what we call success-based capital. So, it's capital associated with either NOCs, SOCs, or a Managed and Support Services contract. In, 2018 we'll do approximately \$225 million in CapEx. Two-thirds of that is directly related to the Managed and Support Services business.

So, you can think about that change as mini Interexports or mini Airwaves, organic versions of it, as we make investments with customers to move them from a basic level of service to a managed and support, full-managed services.

2018, I mentioned, from a share repurchase perspective, 50% of the \$1.4 billion will be earmarked essentially. Most of it, \$75 million for antidilutive share purchase will be earmarked to pay down for – to pay down the acquisitions.

So, we've returned – I'm sorry, one point on the acquisitions Greg made. I think it's important to note, this came up a couple of times in earnings calls this year. The business without acquisitions grew 3%. We grew EBITDA and grew EPS. The acquisitions of Airwave/Interexport, Kodiak, CallWorks, and Spillman drove \$1.20 in EPS. So, the acquisitions are accretive. Certainly, the share buyback, the opportunistic share buyback, as well as what we've done from a CapEx perspective in an asset-light model, we can talk about many things the Bruce mentioned, outsourcing our largest manufacturing facility, Greg mentioned facilities and the move out of Schaumburg to Chicago.

So this idea of asset-light allows us to redeploy and dedicate that CapEx to a success-based CapEx. So we've done that. We've returned \$4.5 billion in share buyback, \$3 billion in acquisitions, including Avigilon and Plant, \$1.2 billion in dividends in that timeframe and \$900 million in CapEx – \$9.5 billion. We've done that and de-levered. End of the year was \$1.3 billion in cash, full availability of the \$2.2 billion revolver, high-quality receivables of \$1.5 billion and a balanced debt maturity. The stack is about nine-year balance debt maturity looking forward.

Greg mentioned this, but I'm going to reiterate it. The pension contribution was done in – we did it last week, but it's 2017 from a tax perspective. So we took advantage of the tax legislation at 35% versus the new tax rate. NPV positive transaction on its own, importantly pushes out any pension contribution to 2024 or beyond.

Many of you have asked this question over the last year in talking about the capital allocation framework. When we get to 2020, you've got tax rate. Our cash tax rate was approximately 15%. So, our ability to redeploy that capital should that tax rate go up to the federal rate at the time of 35% would obviously mean a reduction in available cash. The pension was probably another couple of hundred million dollars of payments that we would have to make in 2020.

And importantly, as Greg mentioned, we expect Airwave, we believe airwave will be extended, and that was another reduction of cash flow. So when we thought about our ability or the questions were around our ability to continue the flywheel of revenue growth, cost management above and below cash generation, deploying that capital in either accretive acquisitions or share buybacks would be hindered by this \$500 million, \$600 million hole we have in cash. Those three issues, as we look to 2020 and beyond, have been largely addressed.

So moving forward, we returned a significant amount of capital. We've de-levered, so our ability to continue to return that capital remains intact. The flywheel hasn't changed. The allocation framework of 50% of operating cash flow for either share repurchase or M&A has not changed. Looking forward as well and as we look at 2018 and beyond, we ended 2017 at record backlog. We grew product backlog 12 quarters, 66% backlog increased, services backlog has grown primarily as a result of multiyear Managed and Support Services agreements, and we're entering 2018 from an age backlog perspective as well as we've ever entered a year coupled with very attractive addressable markets.

And I know you've seen this slide in many presentations, but we talk about the Land Mobile platform and growth in Land Mobile, that platform allowing us to drive managed and support services and software within that customer base. Managed and Support Services, Kelly talked about a \$2 billion number growing at mid-single digits on a \$6 billion addressable market.

Andrew mentioned \$400 million in revenue in a \$5 billion addressable market and Avigilon adds \$11 billion of addressable market. In 2016, Avigilon did about \$350 million in revenue. So, the key takeaways that I'd like to leave you with is the platform, the LMR platform continues to grow. The flywheel of generating cash as a result of that continues, our availability to deploy capital will continue. Managed and Support Services grows on that platform as well as the command center.

Avigilon adds TAM and continued opportunistic share repurchase and accretive acquisitions will continue to drive the flywheel that we talk about with respect to revenue growth, cost discipline, and maniacal focus on acceleration of cash.

So, that's really all I had for you today. And at this time, I'd like to ask Greg to come up for Q&A.

### **QUESTION AND ANSWER SECTION**

**<Q – Adam Tindle – Raymond James & Associates, Inc.>**: Adam Tindle, Raymond James.

**<A – Greg Brown – Motorola Solutions, Inc.>**: Good morning.

**<Q – Adam Tindle – Raymond James & Associates, Inc.>**: Good morning, Greg. Earlier, you mentioned \$8 billion of revenue in 2020, and this may be for Greg or Gino. I just wanted to understand what are the incremental margins on that next \$1 billion of revenue, and is it disproportionately software-based because it would seem like the \$8 number in EPS doesn't imply a lot of leverage on the operating line, but maybe there's some conservatism built in?

**<A – Gino Bonanotte – Motorola Solutions, Inc.>**: So, the 8 and 8 in 2020 is approximately \$8 billion in 2020 and probably \$8-plus in earnings per share, as you connect those dots. I think from a margin standpoint, generally speaking, you should expect the comparable gross margins. And even though software typically has higher margins as Andrew showed you, out of our \$6.3 billion or \$6.4 billion last year, about \$400 million – or this year, I should say, of the \$7.1 billion, \$400 million is software.

So, while margins generally are higher in software and Sinclair will drive them higher both gross and operating, it's platforming and getting from here to there, and it's a fairly small contribution still against the overall revenue base.

**<Q – Adam Tindle – Raymond James & Associates, Inc.>**: If could just...

**<A – Greg Brown – Motorola Solutions, Inc.>**: Sure.

**<Q – Adam Tindle – Raymond James & Associates, Inc.>**: One quick follow-up. There was a slide earlier on Avigilon and Plant 2018 expectations, \$350 million of revenue and \$25 million of...

**<A – Gino Bonanotte – Motorola Solutions, Inc.>**: \$25 million of adjusted EBITDA.

**<Q – Adam Tindle – Raymond James & Associates, Inc.>**: I know there's some IFRS accounting numbers in Avigilon, but it would imply 7% EBITDA margin. So, I'm just trying to understand the moving parts and when these might move up more towards the corporate average?

**<A – Gino Bonanotte – Motorola Solutions, Inc.>**: Yeah. So, the way to think about that number and we'll obviously provide more detail once we close, once we go through the purchase price allocation, the differences between U.S. GAAP and we'll provide more detail on that. But certainly, our expectation is that the EBITDA margin is going forward in 2019

certainly north of that 7%. I think we'll wait to dimensionalize that more, but certainly north of that 7% margin that you quoted.

Just if I could add a note on growth drivers, not necessarily bridging to the \$8 billion, but just as we think about what will drive growth going forward, it's really a third related to that LMR platform and frankly the Avigilon platform, a third in Managed and Support Services and a third in the command center and software. Roughly speaking...

**<Q – Adam Tindle – Raymond James & Associates, Inc.>**: Right.

**<A – Gino Bonanotte – Motorola Solutions, Inc.>**: ...that combination of the margin, as Greg said, you should think about it. But right now, we'll give you more detail, comparable to the margin profile of MSI.

**<Q – Matt Cabral – Goldman Sachs & Co. LLC>**: Thank you. Matt Cabral, Goldman Sachs again. So, firstly, I wanted to start off also on the \$8 billion of revenue that you threw out for 2020. Just to clarify, is that an organic target that you're talking about for 2019 or 2020 or are you building an anticipated M&A? And then my second question, just thinking about the pace of acquisitions going forward, so after PlantCML and Avigilon closed, do you feel you filled most of the major holes that you had within your portfolio or should we continue to expect larger deals going forward?

**<A – Greg Brown – Motorola Solutions, Inc.>**: So on the first one, the approximately \$8 billion, think of it as organic and the expected to be closed Airbus PlantCML and Avigilon. It doesn't contemplate the need to make further acquisitions to achieve that top-line estimate in 2020.

In terms of acquisitions, I think in the command center as Andrew and Brda referenced, we pretty much have filled out the components of the suite that we need. We now need to integrate and platform, so I think Andrew and that team have enough to say grace over this year. And we're using the cash to close Avigilon and PlantCML, so we'll do the \$70 million or \$75 million of share repurchase to absorb dilution, but I don't see us doing at present remaining acquisitions for the balance of this fiscal year.

Quoting Brda, however, I wouldn't say, never say never. It depends on what opportunities come. But when I look at the portfolio, LMR platform, public safety, LTE platform, and interoperability, the enhanced suite for command center, and Avigilon which we're acquiring end-to-end, yes, I think we have the necessary components. The thing we keep our eye on is mini airwaves and be opportunistic around those if they come.

George?

**<Q – George Notter – Jefferies LLC>**: Can you just talk about the sort of larger funding environment around LMR? I mean I just sort of think about tax proceed, I imagine are very healthy certainly federal we'll see, but certainly, state and local have to be very, very good. I know historically, there have been significant grant programs around LMR that have fueled the business. And certainly, the environment I think is probably politically very helpful just in terms of hurricanes, storms, fires, other sorts of unfortunate acts. But can you just kind of talk about the bigger picture for LMR, and will you think that can translate into in terms of growth?

**<A – Greg Brown – Motorola Solutions, Inc.>**: Yeah. And I think Jack talked about this that the funding environment generally in North America is favorable for the reasons you've talked about. The other thing that strikes me is, this is one of the few times that I remember all theaters: North America, Latin America, EMEA and Asia-Pac macro economically growing at the same time.

So I think the funding environment is generally healthy. Macro economically, the environment is positive from an economic growth and expansion standpoint for the theaters. And I think things like Irma and Harvey and others, while they don't stimulate demand per se, they reinforce the need and the criticality for long-term deployment of LMR platforms and multi-year services that Kelly will serve on top of it.

So, I talked about the business being strong. We're very strong. It's for all those reasons, George. It's the backlog, the aged backlog, the funding environment, the strength of our portfolio. If I look through the windshield, not the rearview

mirror, I think the addressable market is there. I think the team is largely in place. I think the acquisitions of what they will contribute and could contribute going forward are favorable, and the overall environment is favorable.

**<Q – George Notter – Jefferies LLC>:** And then just as a follow-up on that...

**<A – Greg Brown – Motorola Solutions, Inc.>:** Sure.

**<Q – George Notter – Jefferies LLC>:** So in 2007, we had the PSIC program. I know I've asked you about this before, but it was I think roughly \$1 billion in LMR sort of grants from the federal government. Is there sort of a rebound effect now with those networks are kind of coming out in terms of getting replaced, and are you seeing any of that in your business right now or is that not really a factor?

**<A – Greg Brown – Motorola Solutions, Inc.>:** I might defer to Jack on that, but I think here's what I think you're speaking to. Are they structural or rebanding or exogenous events that will stimulate demand? We had rebanding in 2007 and 2008. We had narrowbanding in 2011 and 2012. The only thing I could see now, and Andrew and Bruce talked about it, are the legislative and regulatory changes driving command center purchases around Next Gen 911 and certain regulations that will push the reevaluation of those 6,400 PSAPs? Maybe there might be a little bit around the T-band here in the US which was part of the overall Middle Class Jobs Relief Act related to FirstNet that will – I think T-band expires 2020 or 2021, not clear whether that stays in place or it gets extended, but not necessarily a structural spectrum event that will stimulate demand.

**<A – Jack Molloy – Motorola Solutions, Inc.>:** George, real quick, just in terms of PSIC. The only real grant that really helps us in North America that drives right now is the Firefighter Assistance Grant. PSIC was great when it happened, but the reality in having lived through this for the last 12 years, our customers became inclined to sit and wait on grants and that actually helped, that slowed our selling cycle. So public safety, and this is really important, public safety is the number one priority when you think about state and local city budgets. They still get all the attention. And so, in a lot of ways, it's nice to have grants, but it's actually helped our customers just in terms of clarity what they need to do in decision making in terms of how to fund it without dependents like grants.

**<A – Greg Brown – Motorola Solutions, Inc.>:** Thanks, Jack.

**<Q>:** Greg, so when I think about you guys, I think about you guys as a smartphone vendor and ERP vendor as well as a cloud provider over the next three to five years and that's the one that sounds like you're trying to foster from the Analyst Day that you try to lay out today. How do I think about your investment priorities to foster that growth while maintaining the growth of your core products?

**<A – Greg Brown – Motorola Solutions, Inc.>:** Well, I don't think you meant smartphone. You didn't mean smartphone. I think of Apple and Samsung and LG and...

**<Q>:** Well, I'm thinking about your LMR devices as well as...

**<A – Greg Brown – Motorola Solutions, Inc.>:** Got it. Multipurpose. Yeah.

**<Q>:** ...multipurpose devices, yes.

**<A – Greg Brown – Motorola Solutions, Inc.>:** Well, I think that as Bruce talked about, he has – so, we've been disciplined in the expense. We've lowered G&A. Operating margin, EBITDA margin are increasing. Yet, at the same time, Bruce has redirected R&D thoughtfully and surgically. As we've platformed in for LMR infrastructure and platformed LMR devices, there's been some efficiencies gained in that.

We used to see PCR, TETRA, P25. And as you integrate and platform infrastructure and subscriber devices, there's efficiencies – those efficiencies, some have come to the bottom-line, some are redeployed to funding growth and Andrews's business around command center software and Kelly's business in Managed and Support Services.

But I think we feel very good at our current level of funding. We've talked about OpEx being slightly down in 2018 over 2017, about \$15 million to \$20 million, those reductions coming out of G&A. So, I think we're well-positioned, ample funding and now from an operating leverage P&L, it should flow through nicely for shareholder return.

<A>: Thought there'd be more. Yes, sir.

<Q>: You guys have been very successful in taking cost out of OpEx over the past several years, this year included. Beyond 2018, is there more opportunity to drive OpEx further?

<A – Greg Brown – Motorola Solutions, Inc.>: Modest. I would think of more OpEx as being kind of managed and perhaps generally flatlined. I mean, at some point, it will go up as volume goes up. But I think the other thing that we're now pivoting toward also is we've done a relatively good job on OpEx.

We're going to spend and burn a little bit more calories around – above gross margin. Services, managed and support services, systems integration, I just think there's some opportunities for us, which is good spade work for us to preserve the margin profile we have today. But on OpEx, we're generally in the later innings against the general profile of the business.

<Q>: If I could one more here.

<A – Greg Brown – Motorola Solutions, Inc.>: Sure.

<Q>: Not to get too far ahead of yourself in terms of the acquisitions both with Plant and Avigilon, is the idea to pull those guys in immediately into the Motorola family or perhaps hold Avigilon out for a little bit longer based on a little bit different business takes you obviously outside of the public safety realm?

<A – Greg Brown – Motorola Solutions, Inc.>: We're not going to "fold" or collapse Avigilon. It's a separate business. They do things differently. I have an appreciation for kind of the entrepreneurial spirit that they bring. So, we're going to continue to operate it as a self-contained subsidiary and report it to Molloy.

We don't need for R&D efficiencies, there's some modest cost take out for the duplication of two public companies. But I want to keep them whole directed led by Molloy and guided with the brand, the resources in our capital. But I don't want to trip them up or get them in our way trying to homogenize them into a broader culture. So, they're going to operate as a separate organization under Jack.

<Q>: In Gino's prepared comments, he was emphasizing a couple of times about the double-digit dividend growth. Is that a long-term strategy for the company? When you think about the free cash flow, could you provide this 2020 targets that you have? I mean, is it like, hey, we're always going to do double-digit dividends, and then whatever's leftover, we'll split between M&A. How do you think about...?

<A – Gino Bonanotte – Motorola Solutions, Inc.>: The way we think about it really, the guideline continues to be the framework of around 30% of operating cash flow dedicated to dividends. So, you can think about that as opposed to an annual growth number, 20% to CapEx, 50% to either share repurchase or acquisition. That's the general guideline. Obviously, we've been outside of that guideline certainly on the share repurchase side as we normalize the balance sheet. But going forward, that should kind of serve as the guideline.

<A – Greg Brown – Motorola Solutions, Inc.>: Yeah. And so historically since the split, I believe every dividend increase has been double-digit. And given where we are and with the cash flow generation of the firm, look past of \$1.4 billion than you decrement with the pension, we're going to have pretty strong cash generation. The yield sitting at 1.9%. So, we don't give future guidance on dividend increases, but we have given double-digit increases historically. The yield is low and the capital is available we'll determine it within the framework that Gino described.

<Q>: So, there's no board discussion about maybe getting the yield up to 3%, 4% and moving off this 30% mix or vice versa. Are these like your fixed targets or the CapEx and the dividends, and then only wiggle room is between...

**<A – Greg Brown – Motorola Solutions, Inc.>** 50/30/20 is the framework, not a hard prescription. So, there's always flex around that. We always talk about the appropriate way to return the capital. It could be dividend, it could be share repurchase. Obviously, we've done both. So, we will have the cash generation and the firepower with the discretion to make those calls. But think of 50/30/20 as a framework, not a locked-in prescription.

**<Q>**: And then what – and for the \$8 billion...

**<A – Greg Brown – Motorola Solutions, Inc.>**: Approximately \$8 billion.

**<Q>**: Approximately \$8 billion for the long-term target in general. Your 28% recurring revenue seems like a lot of the things that were talked about in terms of what's going on in the call center...

**<A – Greg Brown – Motorola Solutions, Inc.>**: Sure.

**<Q>**: ...and I think the cloud is going to shift that even more aggressively going forward. So, what is – where do you think you are in the 8/8 and then what is the long-term target as far as the recurring revenue or the mix of total revenue?

**<A – Gino Bonanotte – Motorola Solutions, Inc.>**: So, the way – perhaps it would be instructive to think about it. In 2018, absent Avigilon, that 28% is about 31%. We expect that to continue to grow. Clearly, Avigilon at this point is not recurring, so it'll change that percentage. But clearly, \$2 billion in revenue and \$6 billion addressable market, strong backlog, we expect that to continue to grow, so we expect that recurring percentage to continue to go up.

**<Q>**: 50%. I mean...

**<A – Greg Brown – Motorola Solutions, Inc.>**: We don't have a target at this point.

**<Q>**: And then last question on that. The market rewards significantly recurring revenue business...

**<A – Greg Brown – Motorola Solutions, Inc.>**: Of course.

**<Q>**: ...is a much higher valuation than I think what you're looking at right now. So, have you considered breaking out a P&L on that business, just like break between equipment and recurring revenue?

**<A – Greg Brown – Motorola Solutions, Inc.>**: So, not so much of that, you're obviously right with the market views and rewards, the higher multiple on recurring revenue and generally software and services. You see the segment reporting we have today which is product and services. What Gino and I are talking about informatively, and Kelly talked about this, right? So, we say services is \$2.6 billion, but \$800 million of that is installation revenue. I think the more instructive number is the \$1.8 billion that Kelly has spent on his presentation.

So, what we're talking about is taking the \$1.8 billion and the \$400 million, and as we think about future segment reporting to get that transparency and bifurcation around recurring, maybe we think about altering the segments and going forward its product which includes or could include SI, and then talk managed and support and software, which is really the recurring element you want measurement on. We're talking about that conversation. Thanks, Walt.

Tavis, Oh! I'm sorry, there is microphone. Oh, okay. Sorry. Yeah.

**<Q>**: Yeah. Two questions. First for Gino, you mentioned success-based CapEx.

**<A – Gino Bonanotte – Motorola Solutions, Inc.>**: Yeah.

**<Q>**: And could you just talk about maybe the incremental return on invested capital on those dollars versus the last few years? And then, Greg, you mentioned at the closing remarks of your previous comments, Airwave you view likely to be extended. What's that process, and what does that look like as far as timeline?

**<A – Greg Brown – Motorola Solutions, Inc.>** Well, I believe Airwave will be extended, just to be a little bit more clear. We are working with the UK Home Office on their process, which is called Reset. They have had these PAC, Public Accounts Committee, parliamentary hearings. We're right in the throes of these conversations now, generally speaking. I think they have said that they expect to conclude these around the July timeframe. So, I mean, I'm just going off of what they have said. So, think Q3 might be a window where we would be able to provide the next level of certainty around that extension and the dimensions around it.

**<A – Gino Bonanotte – Motorola Solutions, Inc.>** Well, with respect to success base capital, the way we think about it is certainly all the projects that we've been – that we've done have been well north of our weighted average cost of capital. When we evaluate the project specifically, as you build the Managed & Support services business, as Kelly was describing, the intimacy you have with the customer, the addition of coverage or capacity, the addition of subscribers, I think it was Tavis that asked the question on whether subscribers are included. The business case is certainly significantly north of our weighted average cost of capital, once we include all those elements.

The examples we can talk about South Carolina, which we mentioned, we can talk about Illinois and where the project started, and where they are now. But it starts well in excess of weighted average cost of capital and goes up from there. The recurring nature, the sticky nature and the intimacy, the RFPs that aren't necessarily led with respect to expanded coverage or capacity, subscribers, it only grows from the initial deployment. The point on CapEx is that the asset-light model has enabled us to dedicate more to the Managed & Support business, and we think the returns are frankly in excess of some of the other things we can do with that capital.

**<A – Greg Brown – Motorola Solutions, Inc.>** Here you go.

**<Q>** I wonder if you could give us a look through to what the leverage ratios will be post acquisitions this year? And then what we should think about as kind of a reasonable long-term range of leverage ratios?

**<A – Gino Bonanotte – Motorola Solutions, Inc.>** Yeah. So, the chart that was up there for 2018 did include the acquisition for this year.

**<Q>** Okay, okay.

**<A – Gino Bonanotte – Motorola Solutions, Inc.>** So we talked about Avigilon, the way we pay for Avigilon specifically was \$400 million – tapping the revolver for \$400 million, \$400 million short-term loan, the rest cash on hand, and repaying the revolver by the end of the year. So that's reflected there.

I think you can think about from a longer term, we're fairly comfortable with the leverage ratios that we have right now 2.5 a little bit more not including the pension. Pension as you saw in that chart at the end of the year we expect that to be about 0.7 turns. So, we're generally comfortable there. We'll see what happens with interest rates and the discount rate and what happens to that pension obligation should we at some point in time be able to fully immunize that pension obligation. But generally, you should think about it in terms of where we've been kind of running that mid-2-plus pension.

**<Q – Tavis McCourt – 12<sup>th</sup> Street Asset Management Company>** Got it. And on the Avigilon acquisition, Greg, I'm not that familiar with the end market, but it seems a relatively large market quite fragmented. I guess, what gives you the confidence that under the guidance of Motorola Solutions, Avigilon can consolidate share in that market? And I guess what gave you the comfort that some of the consumer grade solutions in that space won't ultimately take share from some of these commercial solutions?

**<A – Greg Brown – Motorola Solutions, Inc.>** Well, the two things that I liked the most about that company was its success and their execution and their end-to-end platform orientation. It's a busy market, it's a huge addressable market. The two leading providers of video are Chinese. There was – there's a question about this earlier. Similar to the composition of how we compete in land mobile radio, I think in many developed economies and countries, people will be hesitant to deploy Chinese technology.

You've seen some of that in the U.S., around the U.S. being reluctant to allow the deployment of Huawei and ZTE in wireless cellular infrastructure. Jack mentioned the ongoing litigation we have with Hytera. But I will say, by the way, Hytera has a systematic, egregious multi-year campaign where they stole from our company; patent infringement, trade secret misappropriation. The hearing just occurred in the ITC in D.C., and we have sued them in a number of other fronts domestically here in the U.S., as well as Germany and Australia.

So, we love competing. We don't like when somebody steals. I have confidence that they'll be held accountable, with appropriate remedies whatever people determine them to be. But, we will do everything to fiercely protect the intellectual property portfolio of us.

So, I also think that it will become more and more in vogue thinking about whether you want to deploy Chinese video surveillance and security gear around critical infrastructure that Jack talked about; oil rigs, mining, power grid. Do you want to do that or LMR for that matter? And do you want it at the U.S. military bases or other locations. So, I think there's some opportunism around there, but this is a very large market that has relatively low penetration, that needs our scale and go-to-market distribution, and much like we do in software, because there was a few questions asked about, do you think your sales force can do this?

What I want Motorola to do in Jack's organization is since there are similar decision makers and common funding sources is to provide the brand, the resource, and the relationship to open the door, and then use overlay sales organizations, whether it's in Sinclair in software, Kelly Mark in sophisticated Managed & Support services, or James Henderson for Avigilon. So, I think we will provide a much larger open door to them that I thought, in addition to their growth organically without us, I think we can bend the revenue growth higher in commercial markets with us and open brand new doors that are not available to them in public safety in U.S. Federal.

**<Q – Tavis McCourt – 12<sup>th</sup> Street Asset Management Company>**: And is there a big-enough gap in capabilities between kind of consumer grade video devices and what Avigilon sells to give you a comfort that...

**<A – Greg Brown – Motorola Solutions, Inc.>**: I think so, yes. Because believe me, we – as I said upfront, Tavis, we're not interested in commodity businesses. We haven't pursued the body-worn video camera segment as some of you maybe think we should have, it's a much lower TAM, this TAM is \$11 billion. This is end-to-end, there's 53 million fixed cameras in the world, and yes, I do think that what they do end-to-end fortified by the 750 patents provide appropriate differentiation.

**<Q – Tavis McCourt – 12<sup>th</sup> Street Asset Management Company>**: And since you brought it up, are you thinking injunction with the ITC against Hytera.

**<A – Greg Brown – Motorola Solutions, Inc.>**: I think that's a remedy that the ITC has available to them. And we'll see if they use it. But...

**<Q – Tavis McCourt – 12<sup>th</sup> Street Asset Management Company>**: And do you have an estimate of their share of the PCR market in the U.S.?

**<A – Greg Brown – Motorola Solutions, Inc.>**: Well, I think it's relatively small in the U.S., as Jack alluded to. A little bit higher in EMEA, very, very small in Latin America. They are the hometown team in China. So, the greater share they have is in China and Asia Pac.

**<Q – Tavis McCourt – 12<sup>th</sup> Street Asset Management Company>**: Great. Thank you.

**<A – Greg Brown – Motorola Solutions, Inc.>**: You bet.

**<Q>**: Greg, you talked a little bit about competition with respect to China. Could you sort of just give us an overall view of market share in competition, and how you view it around the world?

**<A – Greg Brown – Motorola Solutions, Inc.>** Well, if you – so, if you go through the land mobile radio business, the primary competitors we have in North America remain Harris for public safety. On the professional and commercial radio business Hytera is a competitor, as is Kenwood and ICOM. That said, our share is healthy and strong. I think it's representative of the quality of the product, the differentiation of performance, and the support services we put around it.

If you pivot to EMEA, the primary competitor around public safety is Airbus, around infrastructure, although they have announced their intention to exit the business, that's public information. And a company called Sepura, who, oh by the way, has been acquired by the Chinese. So I think – in the form of Hytera. So were there's certain countries with Sepura deployment, which is usually TETRA infrastructure or TETRA devices, those theaters have – should, I believe, reevaluate their comfort level with having a Chinese provider in mission-critical infrastructure and implementation. This is not cellular service. This is public safety and national security.

In Asia Pac, it's largely Hytera in the professional and commercial radio business, and probably Sepura as well on TETRA. And if I go to Latin America, the professional and commercial radio side is primarily Kenwood would be our largest competitor in Latin America.

So, where we – the question was asked, when we lose, why do we lose. I agree with Molloy's answer. I'd also say that when we lose, typically if it's public safety, we're generally not the incumbent, not the installed system that's been there, and we probably don't have the relationships that we should because we're not the incumbent. Those are the only things that I would add.

Yes, sir?

**<Q>**: So one of the things you didn't spend a lot of time talking about today was FirstNet. Just curious if you can comment on the ramp of FirstNet and just where that fits within your strategic initiatives that you laid out? And then the second piece of the question is, so you talked about this year \$20 million to \$40 million of revenue.

**<A – Greg Brown – Motorola Solutions, Inc.>** Right.

**<Q>**: I know the loading of subscribers is a big factor in that, could you just help us understand once fully ramped, just maybe what that opportunity could be, what that could look like for you?

**<A – Greg Brown – Motorola Solutions, Inc.>** It's unclear on the latter question. We have updated the guidance to say 20 million to 40 million, because we think the contribution at least in 2018 will be relatively small – we are making an assumption to your point on subscriber take and penetration of those cellular 4G providers that either stay with AT&T and switched to FirstNet or vacate Verizon and go to FirstNet. It's still muddled. I mean, we heard a lot and by the way they did a great job of getting all 56 states and territories to "opt in". So the starter pistol is fired, it's less clear the take rate and uptake of that service.

So you saw us talk about addressable market, we talked about land mobile radio and public safety LTE in \$10 billion. So I have seen some estimates size public safety LTE at about \$1 billion. The addressable market we talked about \$32 billion is available to us today. We would probably see the public safety LTE market inclusive of FirstNet of being a subset of that \$1 billion. And that's more or less a reflection of the pace of uptake and subscription conversion on to that new network. So our best estimate is \$20 million to \$40 million, we'll see how it goes.

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**Greg Brown, Chairman and Chief Executive Officer, Motorola Solutions, Inc.**

I do – I really appreciate you coming. We always debate the frequency of doing FAMs, Financial Analyst Meetings. I would love to hear your feedback. We decide whether it's Chicago or New York. Obviously, we chose Chicago for this one. Look, I respect your time. I know it's not the most convenient thing in the world, but I thought it was a good time. We just printed the year. We guided on Q1. We updated you on Q1 guidance with Avigilon and PlantCML, \$350 million of revenue, \$25 million of adjusted EBITDA.

We updated you today on our views around Airwave and that being extended, and we updated you today on our view of 8 & 8 in 2020, approximately \$8 billion and \$8 per share plus.

So, I hope you got a lot of out of it. I appreciate the Motorola people and everybody taking the time to prepare. Thanks for coming, thanks for the questions, and thanks for your continued confidence.