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# EDITED TRANSCRIPT

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## PRESENTATION

**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Good morning, everyone. Just kindly take your seats and we will get started. I'm Steve Kunszabo, Iridium's executive director of investor relations and I would like to welcome you to Iridium's 2015 analyst day, I'm pleased to be your master of ceremonies today.

It's been a transformative number of years since we were last together in December of 2010 for an analyst day, and we are excited that many of you are able to join us here in Phoenix just down the road from our key network facilities. I would also like to welcome the many analysts and investors who couldn't be here in the room with us but are listening to our live webcast.

Before we begin, I would like to briefly review the required safe harbor guidelines, I would like to caution all participants that today's analyst day may contain forward looking statements within the meaning of the private securities litigation reform act of 1995, forward looking statements are statements that are not historical fact and includes statements about our future expectations, plans and prospects. Such forward looking statements are based upon our current beliefs and expectations and are subject to risks which could cause actual results to differ materially from the forward looking statements.

Such risks are more fully discussed in our filings with the Securities and Exchange Commission. Our remarks today should be considered in light of such risks.

Any forward-looking statements represent our views only as of today. And while we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, even if our expectations or views change.

I would also like to point out that we'll also be referring to non-GAAP financial measures during today's presentation, you can find the reconciliation of these non-GAAP financial measures on our investor relations website.



With that, I just wanted to quickly walk through our agenda. We've got a great day planned. We will kick off with our chief executive officer, Matt Desch, providing you with the strategic outline of our business and from there, our executive vice president of sales and marketing, Bryan Hartin, will provide an overview of our commercial business.

Bryan will be followed by our executive vice president of government programs, Scott Scheimreif, who will focus on the government market and from there, our chief operating officer, Scott Smith, will take you through a technology and network leadership.

Alan Khalili and Vinnie Capezzuto from Aireon Senior Leadership Team, we will update you on that important venture, and finally, Tom Fitzpatrick, our chief financial officer, will take us home with the financial review and look ahead.

And then finally, just as a housekeeping note, we will have breaks throughout the morning for Q&A with a final Q&A session before lunch.

So with that, we will like to show you a brief video and then welcome our chief executive officer, Matt Desch.

(Video Presentation)

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Thank you for being here. That video always gets my blood going. So welcome to Arizona, our home in the desert here. It is the center of our operations and a lot of our technical businesses out here and you will see some of that today as well as our satellite being manufactured at Orbital Sciences not too far away.

I am Matt Desch, I'm the CEO of the Company and have been for about the last eight plus years here and this is something we haven't done in a while but it is time to really, again, open the books on what we are doing right now and explain where we think we are going in the future and I appreciate all those of you who traveled out here to see us.

I also want to thank all of you on the webcast for being part of this and I hope you can follow along. I want to thank Steve Kunszabo, very briefly too, Steve keeps us all on track and he is there to help our investors in any way with the material you see and great to have Steve for pulling this all together.

And so we are -- we really think there is a really bright future and we have a history, a track record, and soon, launching satellite but this is all about an innovation engine that we have created that we are -- and really recreating right now over the next couple of years as we launched Iridium NEXT.

And the summary of the -- I would say this morning's presentation can be summed up into this one chart which is really the investment case and it is really simple and straightforward. It is really about a company that has demonstrated growth over the years and which has a visibility to continue the operational EBITDA growth and you are going to see that in the presentation today, where we think that will be happening.

We see a CapEx program that we have been underweight now for five plus years that we see ending in a few years from now and when that happens, that really creates a transformative event in and by 2018 that generates significant cash flow and allows us to retire our debt and really creates long-term value creation.

So that is really the summary, we could end it right there. And we would be -- we would have accomplished what we wanted to accomplish but I think there is so much more we really want to talk about the exciting nature of what this company is about.

And we started of course, with the network, and many of you, I know, and we have talked about this so you know this but we start and end with such an important feature and that is our network.



We have the most unique network in the world, the only communication network that covers 100% of the planet and 66 satellites in low-earth orbits flying around the planet and that has allowed us to deliver a differentiated service to a number of markets, that has allowed us to grow our subscriber substantially over the years, provide support to our largest and most -- single largest customer, the DOD, and many other militaries around the world, allowed us to supply services in a number of different market from maritime to aviation, machine to machine to terrestrial markets and achieved service revenue of CAGR over the last five years and operational EBITDA CAGR of 7% and 8%.

We will talk more about that and I'm really just providing a brief overview but one thing I wanted to kind of start with is thinking back, the first time we did this shortly after going public, we had an analyst day in 2010.

And we have characterized, as we were in New York, we were thinking back about that in the middle of things here, these were kind of some of the key topics that we are talking about then. And our new network, Iridium NEXT, our launch program which was untried, this concept of hosted payloads which we had an idea about, the US government and operational EBITDA growth through this. And so if you think about then, in 2010 versus 2015, it is quite stark if you will, in terms of the progress that we have made and how we have really checked the boxes over time.

In 2010, about Iridium NEXT, it was a brand new program and we had just really launched that program in 2009, we explained that we plan to launch it in 2015 and have it completed in 2017 and in fact, that is where we are at. And we will be launching this year and it is hard to believe the progress that we have made, really, now over that time.

In terms of our launch program, we have selected SpaceX, and I think people thought we were crazy, in fact, we had not successful launch that had happened in 2010 and I know our investors were probably wondering, you know, what kind of risk we were really taking on with that program. In fact, it turned out to be a fantastic decision at half the cost of anything we would have been able to do.

And of course, you know, that is probably one of the least things we are working on right now in terms of where we are going.

In hosted payloads, great opportunity, expressed how excited we were about using some space on our satellites and creating some business opportunities. I remember discussing the big pipeline we had and all of the things we thought would happen. I know there were some skepticism whether we can accomplish that, not only did we accomplish it, we really created some very, very powerful and important services with Aireon and Harris and we are going to be talking about that because those have developed so nicely.

The US government, I know there was a lot of concern back then, we had a great relationship but the profile of our business with the government had been changing quite dramatically with the downturn in Afghanistan and Iraq, and a lot of people wondered what would happen once our contract expired. Of course, we have -- that has been a great success story, we have a long-term new relationship with the government we will talk about and it is actually fueling a lot of business for us and Scott Scheimreif will talk about that today.

And operational EBITDA, you see what has happened there. Remember, visiting a lot of people for the first time shortly after we went public and you know, people trying to understand sort of our revenue profile and really couldn't see very far out but in fact, you can see what we have accomplished in that time. And so you know, clearly, one of the themes today will be that Iridium NEXT is almost here and this is such because this will provide us the platform on which we will continue to innovate over the coming 15 plus years or so.

It is going to retain our unique architecture, it is going to allow our seamless transition from our current growing customer base into a brand new services, we are confident that we will be completed by 2017 on schedule and you are going to hear a lot more about that from Scott Smith today with our first launch later this year.

You are going to see our satellites under construction, we were quite proud to take you to them and it is getting quite busy there right now as the satellites are rolling off the line and we really hit a lot of our milestones, and again, Scott will talk about that.

So to briefly, I know people here know of -- looking back 2014 was a good year of growth and we exceeded the targets we had set for ourselves and got back to growth of 6% in service revenue, 7% in equipment revenue, growth in our underlying engineering support revenue which lead to bottom line growth in operational EBITDA and of course, based upon its subscriber growth of 11%.

And growth is really what we are about and so it is nice to see we are building on 2015 on a good financial platform in 2014.

So as we look forward, you know, our vision is to continue to grow, taking advantage of this powerful platform that we have, our unique position in the marketplace. We see sort of five pillars of growth and the US government is -- this additional business in Aireon and Harris that has been generated in hosted payloads, a number of new products and some of you are able to see some of them out here but more envisioned there.

Of course, the faster growing area, machine to machine, and then maritime and aviation, both important segments for us that are now being really rejuvenated with even higher speed and more capable services and so across the board, we feel like we are building on a solid foundation of growth with a lot of growth to come.

And to talk briefly about these because I know a lot of you -- you have seen me and you have seen Tom Fitzpatrick, but what I really want to introduce investors to today is really, the rest of our team, and Bryan Hartin and Scott Scheimreif who will really go through these in more detail and we will -- you get a chance to see how they all build together when Tom pulls it all together at the end.

So you know, the US government of course is the solid foundation, again, of growth, and we are building off of this new fixed-price contract, and it has done exactly what we hoped it would do. It has kind of created an environment where our customer and us are working on a whole number of new things, potential new things together, which I think will lead to both additional revenues as well as a solid foundation for another renewal in a few years here.

So we were going through a period in the 2010 to 2014 time where we were fighting sort of the headwinds and drawdowns and of course, on the basis of the contract, you can see we now have visibility to a solid growth rate and in fact, an even more vibrant strategic relationship with that customer.

The second growth pillar and I'm really excited for you to meet Vinny and Alan later today, there is actually an international air traffic management conference in Europe so Don Thoma, who is the CEO of this business, you know, won't be here today, but you got two of the key people, the CTO and the CFO here today to talk about this business and it is really -- you know, it is one of the most exciting new businesses that we have been a part of -- that I have been a part of and to see it develop over the last two to three years has been really, really exciting.

Of course, the fact that we are going to be able to receive the transmissions of all of the aircraft around the world on our new satellites and relay those to air traffic controllers, allowing the visibility of aircrafts in the world to go from the left hand chart here, which is you know, roughly 10% of the world where radar is or the new ground transmitters that receive ADS-B signals to really being able to cover the whole world and have surveillance across the world.

And you know, this business has gone from a standing start to being fully funded to having contracts with customers that provide positive cash flows and with a lot of potential in terms of the future business and you will see us talk a bit more about that today and where that business is right now.

A third growth pillar is new products and we are introducing them as we go along and I know we are putting a lot of money into a new network but we are also continuing to invest in new products that will deliver continued growth on our current network and into the future. The biggest one we had last year really was Iridium Go, and you know, our vision had been the -- it's not -- we are the satellite phone leader by far, but really what our customers really want are smartphones. They want their smartphones to work everywhere in the world and Iridium Go sort of untethers the world and we think that is a powerful platform for the future.

And some of you got the chance to see and I hope that during the break, you get a chance to talk to Eric Moore about our commercial push-to-talk business which is rolling out really right now and it is by far, the best push-to-talk product in the world and I would even say that terrestrial orbit satellite and really the enthusiasm about this as a product allow workgroups to work more effectively anywhere in the world is quite exciting.

The fourth growth pillar, of course, is our fastest growing business, it makes up nearly 50% of our subscribers and almost 25% of our commercial revenues as of 2014. And that is our machine to machine business.

Iridium is really uniquely suited for this business because of our low earth orbiting system, because of our uncompromising coverage and performance that works anywhere on the planet, you can understand why a lot of enterprises would like to build their businesses on an Iridium platform versus any other right now.

And with our devices getting smaller and let expensive and being integrated in more and more things, like the heavy equipment OEM business most recently into consumer devices and many other areas and this has really generated a lot of growth and we think that we are riding, really, a global wave of movement toward this thing called the internet of things which will continue to power this growth pillar.

And then finally, really one that is the most recent and the -- looking forward to talking a bit more about this today, which is broadband.

And we have been in this business in a high speed way, but only up to 128 kilobits per second on ships and most recently, on to some rotor craft and aircraft, but this is really what Iridium NEXT, we will have a very powerful platform that will enable us to provide much higher speed, much more capability and really get into this broadband world that is emerging in aviation, maritime and the terrestrial world.

We are really excited about the partners we have just announced in the last week and in fact, in the latest news, as you know yesterday, we announced the fifth manufacturer to join our suppliers in Thales, the Thales Group, really the overall Thales that is a owner of Thales Alenia Space which is making -- which is the prime for our satellites but Thales group is a major player in the aviation, maritime and land spaces, and they will be joining Cobham which is a major player in the maritime and aviation space, Rockwell Collins, which is really known well on every flight, almost every flight deck and L3 Communications, and ICG which you might not know but is a very important partner and really an innovator in this space as well.

And so these new products will be rolling out very shortly, they will be -- even before our network is complete and we will talk about that and we think this will power additional growth as well.

And then really, not one of our -- if you will, core growth platforms, but I would call maybe the icing on the cake or certainly our future growth platform for us is Iridium Prime. And we announced this initiative about 12 to 18 months ago and the concept was once we complete making 81 satellites, our network can actually support more than 66 satellites and we can take advantage of this infrastructure by taking off the very -- the payload that you will see as you go through the factory tour and it gives us a fantastic platform for other payloads and we have been out talking about that concept and in fact, have a pipeline of interested parties we would like to use our platform and fly in our network in a much more cost effective way than if they had to start from scratch.

And so this is on top of everything else we are doing, it's a future growth platform for 2018 and beyond but we are excited about the potential that Iridium Prime brings us as well.

And so, it is a summary really of our overall business and we are going to get into more detail here but we really are, as I said, poised to transform our cash flow profile and that is what we have been working on and that execution is going well and we have a healthy constellation and you are going to hear more detail about that from Scott, our new network is launching this year and will be completed soon, and our core services have been growing and you know, and while today, CapEx has been growing and net leverage is up, and operational EBITDA is growing and the NEXT is under construction, it won't be long before Iridium in 2018 has CapEx coming down and leverage decline and continued growth and of course Iridium NEXT complete which leads to significant cash flow.

So sort of the summary, many of you have seen who we are still works and we are in an attractive and growing market and we have a very unique position in it with favorable competitive dynamics based upon our business model, high barriers to entry and it is not easy to do this. I know there are some others that want to do this.

I can tell you we have a lot of experience in this area and know what they are up against. We are here, we are here today with network leadership and with a lot of advantages, we have a track record of growth, we know how to do this, and I got a great management team that I think you are going to see how we are working together to exploit this resource that we have significant operating leverage and of course, transform -- poised to transform our cash flow profile.



And so look forward to your questions and answers and we are going to take some breaks before we take these breaks and have Q&A and so I hope you are thinking about that. But at this point, I would like to dig into the business in a little bit more detail and focus on the commercial side to begin with Bryan Hartin who is our EVP of sales and marketing.

So, Bryan?

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**Bryan Hartin** - *Iridium Communications, Inc. - Sales & Marketing*

All right, good morning, everybody. It is great to be here with you. A Matt said, you know, Tom and Matt usually don't let me get out in front of you guys so I'm going to take advantage of the next 30 minutes and get a little bit deeper into the commercial business.

Matt, thanks for the introduction, so, really my job, I can boil it down to a few words. I'm the guy that is responsible for delivering the equipment, service revenue for the commercial business and as well as the earnings.

And so what am I responsible for? I've got a global channel team, and I've got a global marketing and PR team and I've got a sales operations team and really more importantly, I will talk about it a little later, is our lines of business that support the markets that we are entering today. And so let me -- I pulled this slide, basically from our Iridium partner conference that we did about a month ago and some of the basics that I know a lot of you in this room have heard before but it is really important and you are going to hear me throughout the next 30 minutes, emphasize lot of these key points. And the key points that we use with our partners and customers in the marketplace.

So the LEO constellation, it is a unique advantage for Iridium and we use that to our advantage. Our customers recognize it and our partners recognize it as well. Wholesale distribution model, this is something that is near and dear to my heart and I am passionate about, it is the right model for us - and we have made great strides over the last few years adding to that partner roster.

We got a great product line up and a robust portfolio and then the reason that robustness, our partners take advantage of that and you are going to hear me say this today as well. They had their own secret sauce to our products and services to make them appealing in the marketplace. And last but not the least, Iridium Certus broadband, this is something that we are extremely excited about and we got a lot of positive feedback from our partners in the markets and I will talk about that as well.

So let us take a look at the market. I think we are in a great spot. It is a market that has generated almost \$2 billion in revenues in 2014 and the CAGR is 12% for the next -- from 2013 to 2023, and we got a significant market share at 27%, now there are other people, what I say, in this space, taking up space, and I will just go through a few of them and the first one is Inmarsat, and obviously, a global player, different than us in a couple of ways, one, we are all wholesale, and they are not and they do compete with our partners and we get some feedback from our partners that it does create some strife, we take advantage of that.

And the other key difference is that they are a geosatellite, and while they may claim to have a global coverage, they don't have that true pole to pole coverage and that is important. Especially as we start to get into areas like GMDSS where a lot of those northern routes are going to be important.

Thuraya, more of a regional player and we run into them in the market from time to time and again, more regional and one of the key differences you are going to hear it today, we are going to give you the full plan in terms of Iridium NEXT and the launches, Thuraya, they really don't have an evolution plan and I think that is going to hold them back.

Globalstar, we obviously, we see them in the market but really right now, our view is that they are more focused on spectrum play and not necessarily the core business and then Orbcomm and again, from a network point of view, we got a lot of advantages over them and strategically, they seem to be more going in the direction of cellular solutions and not necessarily focus on our core business and so there you see the snapshot of the market and the way we line up in that market and which again, I think, we got a very strong position now and we are going to exploit that going forward.



This is an area I want to spend a few minutes on because it is really important and again, when I talk about the global channel team that I have in the lines of business, this is a core and fundamental principle of the way we do business.

So you can see there at the core of this is Iridium. It is our products and services that this ecosystem of partners use to offer products and services to the end users. I'm not going to go through all of the acronyms but we have a couple of different -- a few different types of partners. We have service providers and these are the partners that go out and sell the service to the end users. And I want to talk about this in M2M but the VARs, the value added resellers and the VAMs, the value added manufacturers, they are extremely important because they again, as I mentioned, that secret sauce, they pull that together and offer solutions to the end user.

One other dynamic here that we are addressing is the fact that we are purely wholesale and I stood up on a month ago and in front of all our partners that were at the conference, and it is many, it is a growing roster of 300 plus and growing every day. And we committed that we are going to remain wholesale. However, one of the things that we have added to the mix is that we also use some of my resources who are experts in their field, to stimulate demand, and I'm going to talk about a few of those areas when we get into M2M.

And so you can see it is quite exciting, you know, this is just a brief snapshot of some of our partners and some of these partners are long-time partners with us and some of them are new partners. But again, it is an extensive list that we grow it but we grow it intelligently, we want partners that are going to bring some value to the market and bring some kind of specialized solution that we can bring to the end users.

So again, a very important part of my job in terms of maintaining and growing and enhancing and this wholesale model. Let us talk a little bit about products and services and the main message I want to convey from this slide is that the products that we sell, the way I view it, they enable me, it is my job to drive, develop and grow the service revenue.

The products are important enabler to do that, but it is that service that we are focused on. And so let us not -- I will just go through these categories briefly and so the handhelds, obviously, hand held is a space that we dominate in today, we are the premier provider and that enables us to drive service revenue. It does also enable us to drive our margin from the handsets and that is very important to us.

And we also have modules, we have L-band transceivers, we have SBD modules and chipsets. Again, this is the enabler that lets us -- allows us to drive service revenue.

And that is the way we approach it.

And finally, Iridium Pilot, it is, again, a finished product and it supports our broadband services across maritime, aviation and land-mobile.

A bit of a deeper dive into the product portfolio, as you can see at the bottom, these products are aimed at driving service revenue across all the markets that we are in -- land mobile, M2M, aviation, and maritime.

They are actually quite sizable businesses and as you can see, from a handset perspective, running unit sales from an annual basis, between 40,000 and 60,000, and I will just combine the L-band transceivers and the modules, that is a lot of units that support not only voice services but data services. These modules, these L-band transceivers, they are the heart and soul of enabling us to drive the service revenue as our partners take these modules, take these L-band transceivers and they build them into their finished product and then they sell to the end users.

So I mentioned the lines of business and I'm not going to go into all the detail in terms of lines of business but again, the way I approach this is I have now been here about -- a little over two years and there was a couple of ways that I could have gone in terms of organizing the business. And again, I'm passionate about the line of business approach because what it does is it allows me and my team to focus on very simply owning these spaces. And owning and dominating these spaces are why we are organized the way we are.

Land mobile, we are the market leader, we are the premium product. And they say imitation is the best form of flattery, we are seeing our competitors copy us, if you will, in some of these segments and we are seeing that in land mobile with our extreme handsets where Inmarsat is coming out and trying to copy that and they can't really fulfill the promise because again, they don't have some of that inherent network capability that we do.



M2M, we are the premium provider. It is an area, again, that I'm passionate about and we are going to grow and again, we are looking to own and dominate that space.

Aviation, we have been the market leader in GA. We have now, with Iridium Certus broadband, an opportunity to expand where we have been not only in the cockpit but also into the cabin and then last but not the least, maritime, we have been the value provider. It is a large addressable market so I will get into more detail on it. So again, I just want to give you a sense of you will hear this line of business terms and not only -- you know, don't need the key message there is it is a way that we are focused on the business and my goal and my job is to make sure that we dominate in these spaces.

And let us go into some of the lines of business. And first of all, in land mobile, if you look at the CAGR over the last six years in land mobile, it is about 4%. I mentioned, we are the premium product and service provider and that unmatched performance of our network, that global service that we provide, it is a definite unique differentiator and advantage for us.

We are also seeing it change. We are seeing where we used to rely heavily on voice services, that is migrating to data services which now is over 50% of the business. That -- in the land mobile business, were I'm definitely focused on driving service revenue, I also have to be conscious of the fact that we do get considerable margin from our handset business and being the leader and the premium provider there, I think we are in great shape.

In terms of the growth strategy, so how do we grow? It is simple, we continue to offer products and services that are going to lead in the market and we are innovating. We are not waiting for Iridium NEXT although that is going to be hugely important, we are innovating on the current constellation with product development around Iridium Go and Iridium push-to-talk.

The market for land mobile, while it is an attractive market, it is a market that we expect to hold our own in, maintain our dominant position and make sure that we are the leader in this space.

Looking at some of the innovation that I mentioned, I want to just go into a little bit more detail on the Iridium Go and share with you the approach that I have to products and innovation like Iridium Go and why it is important. Why it is important.

In land mobile, again, we got a very dominant position in terms of our handsets. But what we know is happening is there is a transformation to smartphones, tablets, and devices. And again, we want to enable those devices over our network and that is why Iridium go is so important.

And we have gotten good reception and it has gotten good traction in the market and the other key differentiator for Iridium Go is the fact that we didn't just launch the product as is, we gave it the ability to continue to innovate. And what I mean by that is we have a very robust application development program.

And the reason that is important is because it allows Iridium Go to be a broadbased appeal in multiple markets. Now, I do a lot of traveling, I have been around the globe, and last year, I was at SMM which is a maritime show in Germany. It is a big maritime show. It is all about boats and maritime and the business.

One of the things that I was pleasantly surprised when I went around that show is the amount of vendors and partners who were displaying Iridium go in all sorts of applications. And again, those application developers are offering unique capabilities that make it very appealing in all different markets. We got app developers that are -- developing apps to detect ocean currents.

We got other app developers that are developing applications to anticipate avalanches. We got more tried and true markets like oil and gas on communication, on platforms using Iridium Go as the communication because obviously, there is no other infrastructure around.

Iridium go is a product that we are extremely excited about and it has been in the marketplace since the middle of last year, and we got great traction and we are focused on making this product a success and again, the driving the service revenue associated with Iridium Go, is the main job that I have.



Iridium push-to-talk. My background is I have been a satellite guy only for about six or seven years and where I come from, it is from the terrestrial wireless and wire line space.

I spent five plus years in Nextel where we dominated push to talk. It was our unique differentiator in the marketplace and it worked. And I am confident that we can replicate and recreate some of that magic that we had at Nextel here at Iridium.

So what are some of the uses of Iridium push-to-talk. It is in the marketplace today with some of the -- with a lot of our partners, and again, let me talk a little bit about the distribution philosophy associated with Iridium push-to-talk. When you are selling handsets, you are going to have to appeal to a wide group of partners. It is different than Iridium push-to-talk, Iridium push-to-talk is a solution sale. We didn't have every partner out there, we didn't just throw Iridium push-to-talk at them.

We took a very structured approach to make sure that the partners who represent Iridium push-to-talk in the marketplace are well-trained, they are qualified, and they can really sell that solution.

Some of the examples of the solution, we have in Africa, I won't go through the exact name but we have a country and their police force using Iridium property to communicate amongst the officers and obviously, they are in an area and environment where there isn't any infrastructure whether it is wireless or land mobile and using Iridium push-to-talk as a primary communication.

In Canada, in the upper regions in Canada where the parks and recreation group operates, again, offering -- using Iridium push-to-talk as their communications means, again, in an area that has no land mobile radio, no terrestrial wireless. And also in Canada, there is an air ambulance group that is using Iridium push-to-talk in the ambulances themselves as well as communicating with the ground.

There are limitless examples that I can provide you. This one though is pretty unique. We have military appeal for MODs and military defense forces across the globe and we demonstrated Iridium push-to-talk, one of them said to me, this service is going to be great, it is a miracle. So with those kind of -- some of the reaction that we are getting to the service in the marketplace.

M2M. This is a growth engine for us. My vision here is really pretty straightforward. This internet of things, you can't -- and I'm sure everybody in this room is probably getting sick of hearing about the internet of things.

But the vision I have here, I will go into some more concrete examples is that I want to make sure that Iridium is positioned here to be the satellite internet of things. I'm not saying that I'm going to go and take over cellular and dominate the world but where terrestrial coverage does not exist, my goal and my vision is to have Iridium being the de facto standard for satellite communications anytime it is associated with M2M and we are making great progress there.

What is our growth strategy here? It is pretty straightforward. I -- we have a great roster of partners that are driving the growth of our M2M business today. And we are going to continue that.

We are going to play up our advantages on our network, one of the things that I have talked about and you have heard consistently from Iridium is global coverage. There is another unique capability in M2M that gives us broad based appeal especially with some of the success we have had with the heavy equipment OEMs. And that is uniform global service.

What I mean by that is these heavy equipment OEMs who span the globe, they need to get Telematics information off their vehicles and their equipment in a consistent fashion. Do they use cellular? Sure they do. But cellular is not necessarily consistent across the globe. Yes, there are standards, GSM, and a lot of them use that.

But it is not a consistent uniform, global service from one provider and when we go around and we discuss and have the detailed discussions with these partners, that is one of the things that we are looking for and that advantage is unique for us.



The other part of the vision is that, okay, you talked about the internet of things and you want to be the satellite de facto standard, how are you going to get there? We are not stopping at heavy equipment, we are also heavily into oil and gas, utility, and one market that we are just scratching the surface on is automotive.

And automotive, when you say that, it conjures up different images in people's minds. One of them is the connected car which is getting a lot of appeal and the other one is enterprise trucking.

Where enterprise trucks like Kenworth, Peterbilt, Mack, they need to have the ability to monitor not just track these assets but get the Telematics information off the vehicles. These are just some of the areas that we are going to attack, we are going to use that ecosystem of partners that I talked about but we are also going to augment that with resources from my team that have expertise in these areas and can drive the growth.

So this is a slide, I think, that one of the ones that I enjoy the most because it starts to show concrete proof that we are making progress. You have heard us talk about CAT and I will just say that one of the things that is delicate when we are pursuing these heavy equipment OEMs and we finally get them, we are excited and we want to tell everyone, well they are not so, they want O.T. kind of keep it a little bit under wraps until we get it out in total and so CAT, obviously, we mentioned in our earnings releases, the detail here is that it is a very interesting story in that there is two primary uses for Iridium M2M with CAT.

One is the inline manufacturing of what I say, as the equipment rolls off the assembly line, Iridium M2M is included in that - in those vehicles, pumps, engines that are rolling off the assembly line. But it doesn't stop there. We have also got what they call slap and track, which is the aftermarket and we got that business as well.

We are starting to see the units roll out and we are starting to get into the marketplace and it is a very exciting time to be associated with CAT and heavy equipment OEMs.

CNH, you probably saw that recent announcement, again, similar to CAT, really the two groups there -- this is construction, I think when people hear CNH, they think, you know, agriculture, this is really focused on construction for both Case and New Holland and again, the same theme that we are hearing. They need the Telematics information off the equipment and they use that information to monitor the health of the vehicles but also to drive service revenue. The service revenue for them is extremely important, this Telematics information again, is the heartbeat and the soul of that service.

We have attracted and closed on another Asian heavy equipment OEM, I can't give you the name there but it is another heavy equipment OEM, again, following the same solution. Needs Telematics information globally and has some cellular today, operates in a lot of areas where there is no cellular coverage and so obviously, Iridium M2M is the obvious alternative.

Moving on to aviation. This is a space that we have been extremely successful in. the CAGR here is about 10% whereas in M2M, it was 29%, the CAGR in aviation over the last six years or so is about 10%. We started from scratch in this business. And we started with general aviation but we have migrated our way to commercial.

One of the key achievements here has been getting approval for safety services and a lot of you are familiar with FANS, we use that to our advantage, we started small and we know that we have from a speed perspective, we are -- we are limited there to a certain degree, that is going to change with Iridium Certus broadband. We are now going to be able to offer more speed, more capacity that they need in the cockpit but also what they are looking for in the cabin especially as it relates to corporate aviation.

A few of the basics here in aviation. One, less is more. Be lightweight, be low cost and low profile. And we have that. Again, our unique advantages of our network give us the ability to offer that over some of the competition. And we focused on airline operations communications. This has helped us the commercial business to get that traction in the cockpit that we are looking for and we are becoming the de facto standard in the cockpit and I will say that we are dominating there especially in VA and rotorcraft but we are looking to grove into commercial and corporate as well.



The broadband opportunity here is almost limitless, we have been held back to a certain degree in terms of the speed that we offer today, that is going to change when we offer Iridium Certus broadband and we are extremely excited about that.

The landscape here is changing a little bit. I'm going to talk, again, a little bit about the competition in that Inmarsat as I mentioned, we're completely wholesale, they are not. One of the key attributes of Iridium NEXT is the fact that we are going to support all of the existing products and services that we offer today on Iridium NEXT.

It may sound like a very basic premise because this was a requirement that we had when we designed and developed NEXT, but our competition doesn't necessarily follow that same principle so what is happening in aviation is that some of these customers who have been reliant on those solutions on the I3 satellites, they migrate to the I4, they aren't supported.

And that is helping us. They are helping push some of these customers into our arms and because they are -- don't want to have to go through the process of the transition, they know that our experience in aviation especially the cockpit and they know that Iridium Certus broadband is coming and so we are getting a second look from these customers and it is going to pay off.

Growth of the OEM program is similar to what I talked about in M2M whereas we are getting in line solutions as they roll off the assembly line, the same thing happening in aviation. Our partners who has been with us a long time have been extremely successful in getting our Iridium solutions on these aircrafts with Airbus and Boeing as they roll off the assembly line.

I mentioned, we are the de facto standard in the cockpit and we do dominate there. The new opportunities, Iridium Certus broadband, we are going to exploit that. We are going to build on a foundation that we have had with Openport and Pilot in aviation specifically around rotorcraft, you have seen the Thales announcement where they are offering Iridium solution for the Sikorsky helicopters and they are not stopping there.

There is also interest in the UAVs, a market that we will be pursuing with Iridium Certus broadband and we feel that we are well-positioned to capture a share of that market as well.

Aviation, it has been a great growth story, we started from scratch, we used the inherent advantages of our network, we listened to the partners and the customers and we have grown that business and we are poised for future growth as well.

Moving to maritime. This is an area that I have spent a considerable amount of time in over the last two years, and the CAGR here in terms of a maritime broadband is about 39% over the last six years and we are well positioned here. Now, have we had some challenges, did we stumble? Yes we did. But did we address those issues head on going to the market and our partners to make sure that we improved the product and the service and primarily the product where we got it back to acceptable operational standards? Yes, we have.

Again, I do a lot of traveling with our partners especially in the maritime space and I was happy to see that in some of the conferences later last year, before I even got up and spoke, they got up in front of me and said Iridium Pilot is fixed. And it made by job a lot easier because probably six to nine months prior to that, that was not the case.

So we have overcome those challenges and we are now positioned to provide and offer a foundation for Iridium Certus broadband in the maritime space.

One of the key initiatives that we are pursuing in maritime is GMDSS. And GMDSS is Global Maritime Distress Safety System and it is an extremely important initiative for us to what I say, unlock the true potential in maritime.

So what do I mean by that? The reason we are after GMDSS is pretty clear for us. First of all, to give you some background. GMDSS today is dominated by Inmarsat and they have the regulatory monopoly on this service. That is a fact.

They have had it for the last 10 to 20 years.

We started this initiative a couple of years ago to make sure that we provided an alternative to Inmarsat in the maritime space. The appeal from our partners and their customers has been very loud. They are looking for, and aggressively want an option to Inmarsat, and we are the option.

But from a business point, you look at it and go okay, it sounds good, you are going through this program and going through this initiative to get approval but why else are you doing it? It gives us access to 60,000 vessels that we now can provide an alternative to Inmarsat to get our equipment and services on there.

And make no mistake, we got their attention and it is a process to get through this and the US Coast Guard sponsorship was extremely important and we have gone through the first leg of the process was just to get considered, and now we are into the stage where they are going to come in to our facilities, here in Arizona, and they are going to inspect and evaluate our products and services.

We anticipate that we will get through that with flying colors and at the end of 2016, we will be in a position to gain final approval which is perfect timing as we launch Iridium Certus broadband.

So speaking of Iridium Certus broadband, let me dive right in to that. This is an extremely exciting time in the Company and for me, my team, and for everyone, the folks that are launching the satellites but this, for us, is a huge achievement that puts us in solid position to grow and expand this business.

A couple of key points. Enterprise-grade broadband across aviation, land mobile and maritime, and so what do I mean by enterprise-grade?

Enterprise-grade means that this is going to be built and designed and have the flexibility for business users. I could use a whole bunch of analogies but this is definitely, you know, Windows Professional version in terms of the service that we are going to be offering. Global coverage, it is important and it makes a difference to the maritime and aviation community especially when you are flying over the top of the poles or you are in the northwest passage and you need global coverage and Iridium Certus broadband is going to provide that.

100% network availability in low-latency, some technical capability that we have to have. That network continuity with existing hardware and services. Sounds simple, sounds straightforward, we have got it, all our existing products and services are going to work, the competition, not necessarily so.

Versatile, what does that mean? What versatile means is that we can offer the L-band products and services in a standalone environment, or we can offer it in a complementary environment to VSAT.

And so as Inmarsat has GX which has integrated KAVSAT and L-band backup, we have a lot of interest from some of threshold leading VSAT providers that they are looking for that capability as well and we are perfectly positioned and the only other option that they can look to.

If I just had one slide, this would be it. I could -- if they just said Bryan, you got five minutes, this would be one slide that I would present and the reason this is the one slide I would present is because this boils it down into a very simple economic terms as to why we are pursuing and investing the money we are in Iridium NEXT and why our partners are investing the money they are in the manufacture, design and development of the Iridium Certus broadband products.

And so first, let us start in the top left. The MSS broadband industry. 13% CAGR through 2025, a \$6 billion business. The key is the top right. Iridium Certus broadband and the investments that we are making gives us the ability to participate in that \$4.5 billion broadband market and then if you further boil it down, if you look at the bottom left, the L-band is almost a \$2 billion component of that broadband marketshare. That is simply why we are making this investment in the next constellation and Iridium Certus broadband. We looked and we are well positioned to take advantage of that \$1.8b market and we are committed to doing it.

So Iridium Certus broadband, some of the use cases, if you will, associated, so how are we going to translate this product and service into tangible and meaningful applications that end users can use? First, aviation broadband. I mentioned where we have come in aviation. We have gone from GA at our limited speeds and we have grown that in the commercial, focusing on the cockpit, focusing on airline operation communications.



This gives us the ability to do two things. One, bring these broadband services into the cockpit but also, especially in corporate aviation, move us into the cabin where we have been limited because of our current speed and capability. That is no longer going to be the case in aviation with Iridium Certus Broadband.

Maritime, this is going to enable global communications for ships business and crew. Again, we have a broadband product today, Iridium Open Port and Iridium Pilot, it has served us very well. It has been the value play, we had some assistance from Inmarsat as they vacated that space in the market and Iridium Open Port and Pilot has been very important because it has given us the foundation to now have a platform to build upon to be appealing to the maritime industry when we introduce Iridium Certus Broadband. We have got some street cred with the maritime community because we are already there.

And I mentioned GMDSS. We also to got the air safety and services and we are going to use Iridium Certus broadband and everything that Iridium NEXT has to offer to capitalize on GMDSS. One thing that can just summarize GMDSS, it punches our ticket. It is the calling card that we are going to have to gain access automatically because we will also be the de facto option and standard for GMDSS in the maritime community and we are going to get that approval.

This slide for me is in the story here, more importantly is really important. We were able to attract world-class manufacturers and partners in this space. If you told me months ago if I can just pick my roster of partners, not go through the process, this would be the five I would pick and why? Because they are the leaders in their area and if you look at Rockwell Collins,

L3, and Thales, they are three of the top five in aviation especially air transport today.

Cobham, if you are going to go to the maritime community and be successful there as well as aviation and land mobile, they are almost a must. And we got them on the roster.

Last but not the least, ICG, a long time partner of Iridium and has been instrumental in our success in getting into the commercial business but also GA and Corporate, they are known world-round in the aviation community and not a household name, but very important to have them part of the roster.

One of the most enjoyable parts of going through this process in attracting these partners was sitting in front of them. When their teams came in to present, the multiple times that they came in, they are truly excited and it was nice being on the other side of the table for a change when the partners came in and they were basically pitching us.

These partners are making a tremendous investment in the development, design, manufacturing, and distribution of these products and we are not dragging them to the table, they came to the table willingly, some of them are even establishing standalone and new business units to support this business. They are truly excited to have Iridium as another option in the broadband space versus who they have to deal with today.

What are we trying to accomplish? A global platform. Enterprise-grade, built for business, built for a harsh environment, built to meet business-critical needs and versatile. It is versatile because it can operate in the standalone environment but also in a complementary environment which covers all the bases for us.

The innovation that these partners bring to the table, it is staggering and the investment that they are making, this gives us the ability to offer meaningful services in these segments.

One example of that is multi-service. Iridium Certus broadband is not a one-trick pony, Iridium Certus broadband products will support multiple services, voice, data, streaming data, our M2M capability and broadcast which is critical for the support of GMDSS in a single product and platform.

We're going to penetrate new markets. Where we may have been held back with our capabilities and speeds in the current constellation, Iridium NEXT and Iridium Certus broadband opens up a whole new area for us that we're prepared to exploit.



You're going to hear Tom talk about and Matt did mention a bit the CapEx holiday that we're going to experience after we launch the constellation. For me, there's no holiday. In 2016 and '17, when we launch Certus broadband, that's when the revenue part of this launch really takes place.

The way I view myself, there's a host of payloads this area on but I'm the revenue payload for broadband starting in 2017 and we can't wait to get started. What are we going to deliver in this? What are we providing to these manufacturers?

We're providing the core technology just as we do. We're staying consistent to our principles just as we do in M2M and land mobile and aviation, those enablers, those modules, we're doing the same thing in Iridium Certus broadband that we did there and we'll building it with success.

These partners will take that core technology. They will build their finished product around it and just as I mentioned, the M2M partners adding their secret sauce, these guys got a big vat of secret sauce that they can bring to the table.

Common tools and technology, again, that consistent uniform global service, we're going to bring that to the table in Iridium Certus broadband. We're going to provide the tools and the capabilities so that this service looks uniform across the globe.

As I mentioned, these partners are bringing a tremendous amount of commitment to the table and they're doing that in the design, development, and distribution of this next generation products. The investments that they are making on our behalf to build and design these products is going to bring us well into the future. We're excited about it and again, I can't emphasize enough the gleam in these partners' eyes in terms of getting cracking on this opportunity.

So to bring this home, it's a pretty simple message. Iridium Certus broadband, what it stands for? It's certain, it's sure, it's reliable. We're not abandoning our principles. We're still going to - we're still committed to a wholesale distribution network, that's going to be remained in place, we're just expanding it.

The robust product portfolio we're innovating today in the current constellation, we're going to continue to innovate on the next constellation with Iridium Certus broadband and other products and services. Most importantly, we are well positioned in all of the markets that we're chasing.

That line of business structure that I talked about in the beginning, we're committed to that and we're ready to deliver across land mobile, maritime, aviation, and M2M. We have a new technology platform to do it.

Again, Iridium Certus broadband, certain, sure, reliable but it's not just the products and services that are going to be certain, sure and reliable. It's the revenue and the earnings that Iridium Certus broadband is going to deliver which are going to be certain, sure and reliable and it's my job to make that happen along with the rest of the broader team.

So thank you very much. I'd like to bring Matt back up and I think we're on the Q&A panel.

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## QUESTIONS AND ANSWERS

**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

This will be our first of three Q&A sessions. We'll spend about 10 minutes on Q&A this first time around and then take our morning break.

My colleagues will work the room with the microphone. First time you ask a question, I just ask that you state your name and company name. So with that, Greg?

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**Greg Burns** - *Sidoti & Company - Analyst*

Greg Burns.



**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Hi, Greg.

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**Greg Burns** - *Sidoti & Company - Analyst*

Is it on?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

You're on.

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**Greg Burns** - *Sidoti & Company - Analyst*

Greg Burns, Sidoti & Company. I just have a question about the GMDSS opportunity. You say you'll open access to 60,000 incremental ships. What's the number of ships you're currently on now?

And I also want to understand what Inmarsat is saying because obviously they're trying to prevent you from getting certified? So what is their argument against Iridium certification? And then lastly, what is the incremental, I guess, opportunity from GMDSS and is it about the GMDSS service in terms of the revenue lift or is about pulling through additional broadband services to these incremental ships?

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**Bryan Hartin** - *Iridium Communications, Inc. - Sales & Marketing*

I'm going to start with the GMDSS process. So I think your question of, you know, what is Inmarsat saying, I mean, they've been pretty vocal. I mean, they are both I would say in public as well as behind the scene.

I've attended some of these IMO meetings with MSCs and again, I mentioned the US Coast Guard being our sponsor, that has helped us tremendously to be able to give us the credibility we need and the support to work with some of those objections.

Clearly, the reason they're objecting is obvious, right? They don't want to give up that monopoly that they have today on GMDSS. What they're trying to attack is reliability but they struggle there because if you look at a GEO network compared to LEO network, let's just say there's some satellite outage in the GEO network and I worked for a GEO operator where I've experienced this before.

You lose everything in that coverage. All those customers go dark if that GEO satellite goes out. With our LEO constellation both in Block 1 and NEXT, if we did have some issue with one of our satellites, the NEXT would come in by in let's say six to seven minutes. The outages, that impact is limited.

Those ships can still use GMDSS to communicate and that's a huge advantage for us along with the full -- the full coverage. The Northwest [Passage] is freeing up. They're going to have issues there and we're not. That's the, I think, the GMDSS assessments thing.

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

You know, I don't have much to add to that, you know, it's clearly sort of a whisper campaign to try to avoid that. But really the proof will be in the pudding when the committee evaluates our network, you know, all we wanted was a fair evaluation.



We're going to get that this year and we feel very confident that we know what the requirements, we know how our networks is performing and it will achieve the results that are being expected and that will go to the process and I believe the market wants us to succeed, you know, because they want choice, they want solutions and that will happen.

Yes, how many ships we're on today, it's tens of thousands, I really don't know a number. We don't keep track of that quite because there's a wholesale operator. It's a little difficult sometime.

We know how many OpenPort pilot devices we have. We know roughly which maritime partners took which LBTs and put them into there but exactly how many there are, I don't really know. Frankly, I don't try to track that as a measurable thing because it's too hard to be sure and qualify.

GMDSS will add but it's more about adding to the overall pull that we can address. Today, when a ship looks to put a solution on, they know they have to put an Inmarsat solution on for GMDSS and then they might also put an Iridium solution on say for more cost-effective crew calling or internet data that might happen.

But once they had to put the GMDSS thermal on and they have one supplier and, of course, that's an advantage to Inmarsat and that they can say, why don't you just use that for other things as well.

Going forward, with Iridium Certus, our solution providers really want to be able to say, look, we can bring the whole solution to you not just a new broadband connection, but we can also take care that GMDSS requirement whether it's a new ship or you want to displace the old one.

And really so GMDSS and I said this on previous earnings calls, it's not about incremental revenue per se. It doesn't make revenue itself. We're not doing it for that. We're doing it because it makes us relevant in a big part of the market that we've never been really relevant before and it allows our service providers and value-added manufacturers there to really address the much bigger market.

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**Bryan Hartin** - *Iridium Communications, Inc. - Sales & Marketing*

There's one other thing that aren't too much in GMDSS. I mentioned in aviation where some of the aviation partners have told us, again, this is what I call forced migration from an I3 to an I4 that is starting to happen in maritime. There are some of these mini-Ms which is a product name that Inmarsat has which is sort of its bread and butter, if you will, for meeting the GMDSS requirement. They are starting that forced migration. That's going to open up an opportunity for us to get on those old vessels and take advantage of it.

Next question, Andrew? I'm sorry - there's Andrew.

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**Andrew Degasperi** - *Macquarie Capital - Analyst*

Thanks. Andrew Degasperi from Macquarie. Can you tell us what specifically is the opportunity in the connect-to-car, who you will compete against and what is your plan of attack. I know it intends to be a long lead time before an OEM install something particularly in the automotive business?

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**Bryan Hartin** - *Iridium Communications, Inc. - Sales & Marketing*

Yup. We've taken a pretty broad-based approach as one of those markets that as I mentioned, there's a lot of different definitions of automotive or connected car. There is the example where you've seen some of the manufacturers like Ford and I believe a few others, you know, they're providing Wi-Fi inside the vehicle.

Well, that works great if you're in terrestrial coverage but if you're not, you're going to need another option and every car doesn't operate in a terrestrial environment so that's an opportunity for us.

Speaking with the automotive of the car market, you've got the requirement where you've got - you have no terrestrial coverage and you need to get a firmware update or a software update to that vehicle, we're well positioned for that in an area where there's no terrestrial coverage.

I mentioned it doesn't just mean connecting car, it means enterprise automotive and enterprise tracking. That's another area that we can leverage some of that experience that we've had in heavy equipment OEM knowing how to pursue these larger companies to go through the sales cycle and it's really pretty simple when you get in to these big companies and you try to find a niche for yourself.

You identify a problem or they help you identify a problem that they have and you solve it and we're going to take that same approach to connect-to-car and automotive as well.

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**Matt Desch** - Iridium Communications, Inc. - Chief Executive Officer

We're still number of years away from being You identify a problem or they help you identify a problem that they have and you solve it and we're going to take that same approach to connected car and automotive as well.

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**Matt Desch** - Iridium Communications, Inc. - Chief Executive Officer

We're still number of years away from being, you know, that to be a mass market and that we're going to be really truly relevant. I think we're well positioned for when the time comes because, you know, technology is getting very small low cost. You can add it with a tiny antenna that you probably wouldn't even notice on the car and you could, with Iridium Certus, be able to get, you know, speeds that were relevant that possibly get some software updates or maybe if an airbag went off, you could - you would know that.

Today, you know, people advertise. OnStar is a good example. They make it sound like it's a satellite-based solution but it's not. It's cellular based and it doesn't help you much if you're out of cellular coverage.

But I think our initial markets are still as Bryan said, are more enterprise grade. We're seeing that today. We do traffic performance or our partners do traffic performance. Today, we're - they're worried about if the driver is texting on their phone or driving too fast or grinding the gears or whatever else you can do in trucks and service trucks, service vehicles.

There is business case for that. The insurance companies will pay for those solutions because of claims. Same thing sort of parallel in aviation where we're kind of enterprise grade aspects in the cockpit and the operational communications.

I think that's the right solution for mobile satellite services and again, we have advantages in all those spaces and I think those are going to expand and continue to expand but, you know, really that's being relevant as the Wi-Fi solution for passengers in cars I think, you know, is not near term.

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**Steve Kunszabo** - Iridium Communications, Inc. - Exec. Director Investor Relation

Let's take Andrew here and then, Chris, we'll make you the last question before we go to break.

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**Andrew Spinola** - Wells Fargo - Analyst

All right. Thanks. Andrew Spinola of Wells Fargo. Good morning.

Question I have for you Bryan, you have a step function throughput with NEXT that you have over your older constellation but your competitors have some pretty big step functions as well and, you know, they talk -- we've got Epic coming in Global Xpress and I'm just wondering when you're out there picturing the business, you know, I have sort of a marketing brochure level of understanding of what they can really deliver and there's just - they've obviously noticed the opportunities in mobility and aviation and maritime.



So I'm just wondering how you compete with potentially much higher throughput satellites and, you know, the alternative competitors, how do you position yourself?

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**Bryan Hartin** - *Iridium Communications, Inc. - Sales & Marketing*

Right. We have mentioned, you know, Epic in GX names. So it really gets back to when I talked about being that versatile, right?. So first of all, we can operate very well with you today just in the L-band in the standalone environment.

With Iridium Certus Broadband and the new products that the VAMs are going to bring to the table, we are going to be able to offer differentiated products at those higher speeds that we couldn't before. So it's going to give us the ability to operate further within the L-band and again what I call the money slide which was that \$1.8 billion L-band market of MSS broadband it's the biggest chunk.

So it gives us the ability to compete more effectively there and the other key piece is what you mentioned about GX and Epic. It's very important that versatile - other part of the versatile capability is to be the compliment. There's a lot of demand today and we're actually on those - a lot of those vessels today offering VSAT backup obviously not the GX, but we're doing that today through our service providers.

And we feel that Iridium Certus Broadband is going to give us the ability to compete more effectively within that L-band whether that be on standalone environment or whether that is a VSAT compliment.

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

I think those markets have evolved. You know, there was a very the fixed satellite services. VSAT market was very independent getting lower cost ships and airplanes, high speed, very high cost, big fixed cost per month, et cetera, changing but not really radically.

And then you have the mobile satellite space, L-band much more certain, you know, in terms of how its ability to get through range, et cetera, and was used for more operational communications but that's blurring right now and GX is a good example of trying to bring those two together in one package surrounding the customer with one solution on both sides and it's one strategy.

I think the other strategy will be taking the best of both those worlds. You know, Epic is bringing a lot of low cost, high speed, and in fact, has an evolution pad that does buy a satellite that do, you know, you Eutelsat and SES satellites and those are really, really maybe best-in-class solutions in Ku and Ka-band solutions coming.

And I think with Iridium Certus, we're kind of best-in-class in the L-band side, again because of coverage, because you're going to see the antenna side, you're going to be quite competitive. The cost structure profiles are going to be really, really good.

We're not going to try to do that all. We're simply not going to try to compete with that side but you can see those sides being put together very effectively in aviation, in maritime and maybe in terrestrial as well where you can bring those solutions and I think you're going to see those kind of approaches, you know, evolved over the next couple of years to kind of point I can't say which one is going to be at the most, I can't say, you can decide yourself whether I'm right.

But I think we're going to be in the fray and the nice thing is we're not in that space at all. We're very much a niche player, if you will, in the broadband space having just guided into that with OpenPort. There's still a lot of opportunities for us and it's a total upside to us, you know, in terms of our growth plan and what we going to be able to do, you know, as it relates to Iridium NEXT so I think we're going to compete very well.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Chris?



**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Over here.

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**Chris Quilty** - *Raymond James - Analyst*

Chris Quilty with Raymond James. First, just a clarification on the GMDSS, do you know if you get certification in '16 and '17 whether you would be required to recertify for an ex-constellation or would that qualification carry over?

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**Bryan Hartin** - *Iridium Communications, Inc. - Sales & Marketing*

Right now, obviously, the evaluation that they're doing is on Block 1. We are going to obviously share information around Iridium NEXT and the constellation. Our goal is to get approval into 2016 and have that be seen once we launch Iridium NEXT.

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**Chris Quilty** - *Raymond James - Analyst*

Okay. The other question was on the partner strategy, good lineup of partners, but there's also some obvious names that are missing, you know, Harris on the land mobile side, Intellian on the maritime, should we expect that list to grow over time or are we about there in terms of the size of the list?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

You know, it's about weaving out the value-added manufacturers, we're going to create and part of that deal is they have to create an M2M sort of product line that has a number of different solutions but we haven't even started to announce the service providers. We're going to take that to market.

So in some cases, you're going to see - first of all, you're going to see some of the same names of service providers. We're going to see much broader collection of partners. Some of them work with us today and some of them will be new who would take those, repackage them, potentially brand them themselves and take from the market.

Is it possible we could add? Yes, we could still add another name or two but our goal isn't to make it a whole lot bigger because we're really trying to create a great environment for those partners to succeed. I doubt you'll see too many more in the aviation space because that's pretty full. There's still some room in the maritime and terrestrial spaces and I think that would more the area I would focus on in terms of maybe adding another name or two in the future and we'll continue to have discussions with some people and I wouldn't be surprised if they see the market evolve, they'll really want to be part of.

But they got to bring some new space, I mean, it's not a matter of just creating competition that - in which our partners can succeed. We really want them to succeed and prosper.

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**Bryan Hartin** - *Iridium Communications, Inc. - Sales & Marketing*

Just to expand on that a little bit. So, Chris, the one - we're trying the thread the needle throughout this process with a couple of key requirements. One, we wanted to make sure that we attract the partners that, you know, are qualified to be able to address the markets that we're going after and I feel really good that we've done that.



The other balance that we have is as I mentioned, these companies are making significant investments in development, design and manufacture and we've got to make sure that that has remained appealing to them so that they it's worth it for them to make the investment. I think we've successfully threaded that needle.

We do have some flexibility in the near term that if we see a market or a product that none of these manufacturers are willing to address, we have some options there but I whole heartedly agree with Matt. I think the roster right now, we feel really good about in the real near term, I wouldn't see many new entrants.

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**Chris Quilty** - *Raymond James - Analyst*

So when the logical extension of this program be, if I looked out, you know, five to 10 years in the future, your hardware revenues would shrink to nil?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Our royalties and, you know, profit might not shrink to nil, if you will, because we are supplying core capabilities here which is important and in fact that kind of broadband space data isn't our huge moneymaker for us today. So I don't think that that's going to shrink but their overall equipment revenues would be smaller in the case of what the potential would be if we try to create those solutions.

But, of course, you know, what we really focused on is the service revenues that can be generated from this and, of course, that our view, would be expansion, you know, as a result of all these and given the market using our network in ways that haven't been used today.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

With that, we'll get wrap up with this first Q&A session. Thanks, Matt. Thanks, Bryan. We're going to take about 15-minute break. We'll pick up after the break with Scott Sheimreiff.

(BREAK)

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## PRESENTATION

**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

If everyone can take their seats again and we'll get started in a minute or two.

We'll going to pick back up with our general session. With that, it's my pleasure to introduce Scott Scheimreif, our Executive Vice President on Government Programs. Scott?

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**Scott Scheimreif** - *Iridium Communications, Inc. - EVP Government Programs*

Thank you, Steve.

Good morning and welcome everyone. As Steve mentioned, introduced me Iridium's Executive Vice President for Government Programs. I thought I'd start off by taking a quick snapshot from a recent report out of Northern Sky Research's focus on government and military satellite communications.



In this report from 2014, NSR indicates that over the next decade running from 2013 to 2023, they expect to see nearly a doubling of narrowband in-service units across various platforms and across various geographical locations. A lot of this is driven primarily by land mobile and M2M applications and the major contributors there for land mobile are concentrated in the area of range extension or satellite Wi-Fi hotspots, very similar to what Iridium launched in 2014 with Iridium GO.

And in the M2M space, what we expect to see there are the main contributors are low cost devices as well as the focus reduction and what's called SWAP or size, weight, and power. And Iridium is always focused on that as in natural evolution of our M2M products.

From a geographical standpoint, it's anticipated that the North America market remains strong, again, supported by M2M and land mobile while market such as the Middle East, Africa, and Asia, will continue to be the growing areas and a lot is based on the fact, unfortunately, due to geopolitical instability but also due to the fact there is not a lot of fixed infrastructure in these areas and as military forces and predominantly the US military looks to support these missions, there's an ongoing need for what continues what they call situational awareness or having some sort of visibility into key assets be it personnel or platforms.

So, Iridium based on our very unique relationship with the DOD and I'll talk more about that is positioned very well to take advantage of this expected growth over the next decade.

So, let's take a closer look at our relationship with our - with our single largest customers. While the remains our single largest customer today and it only accounts for about 10% of our overall subscribers on the network, this satisfies a huge portion across the US government base both civilian as military. We've benefitted from this longstanding strategic relationship over the last decade and a half, really underpinning or underpinned by the unique capabilities of the Iridium network.

You know, here, it's mentioned all throughout today's presentations. The global footprint coupled with the cross linking of our satellites in space provides a level of operational security for armed forces, that really unparalleled in the in the mobile satellite or commercial satellite space.

And what it provides, our war fighters has the ability to communicate anywhere in the world and have their voice and data transmissions cross linking in space and come down to a dedicated government facility, again, that provides level of operational security. It's not available anywhere else.

You can see here from the graph primarily due to declines and operations tempo by the US, we saw a surge take place driven by the launch of Iridium service in the 2009 and '10 frame - '09 and '10 timeframe that resulted in an increasing revenue in 2011 for us.

But because of the declines in operations tempo and through patrols that occurred in Iraq and eventually into Afghanistan, we recognize the challenge that we faced as well as all other commercial satellite operation space. So we engaged the US government Department of Defense in 2012 and 2013 and as a result, really, executed what I would describe as an unprecedented airtime services contract for the first time ever with the US government that provides a base of five years for a fix revenue stream of \$400 million for a well defined set of services that's currently available today and that will transition into our next constellation.

And you can see this really supports the 8% CAGR that we got going over the next five years. But I do want to point out that we're not stopping there. You know, as we anticipate and working closely with our government costumers, there's an ongoing need and emerging requirements that exist and we believe we're positioned well to take advantage of that and this will actually drive incremental revenue for us, what we believe is as early as 2016 and I'll spend some time going into some of these applications.

So, the point of this chart here is really to emphasize that as a result that this new contract has put in place in late '13, we've begun to see a significant change in policy and guidance coming out of senior leadership within the Pentagon and across the Department of Defense.

And simply put, their message is use it. And the reason by it - the reason behind that is because they have now invested and made a commitment into Iridium and that's been an ongoing theme over the last several years and this is really a foot stomper, if you will, that really captures their position on our value and our relationship.



Just to provide some of the quotes, the key one I have up here at the top is coming out of the current acting CIO of the Department of Defense, Mr. Terry Halvorsen and his point was he's encouraging use to take full advantage of what he describes as a cost-savings opportunity. So, it does provide them some predictability of being to understand what their cost structure is going to look like over the next five years and that's important when you're dealing with multiyear budgets.

So, the key takeaway here, again, is that it's being well adapted. We started to see significant uptake in the year 2014. We expect to continue that over the next several years and from our position, this contract is very, very solid, you know, based on the feedback that we're getting from the department.

So, I'd also like to point out that as a result of this new contract, it's really creative, what I would describe as a win-win environment for both government and the industry. And both government and industry are actually reaping some significant benefits as a result of it.

So, what we're looking at here is as a result of a government making a commitment and publicly executing this contract, it's actually created a set or I should say a wave of incentives and momentum on behalf of our industry partners to invest and innovate around Iridium technology. So, now, their investing their own R&D dollars recognizing that they have somewhat of a captured audience because this audience has now made the commitment into Iridium.

And because of the fact that they're not necessarily constrained with having to do with the administrative burden of managing an ongoing recurring cost because they have made this investment, we're looked at more like a military satellite model versus a commercial satellite model unlike a lot of our competitors in this space, we're still feeling some of the constraints due to budget reductions. We're actually seeing our business grow at the fastest rate ever in our relationship with the while the others in the marketplace are challenged.

And as a result of this, we're seeing a lot of these new technologies and new products get introduced into the marketplace quicker so it's actually reducing risk and reducing schedule in satisfying and solving some of the government's toughest problems.

So, it's important to note, you know, that as we look out into the future, you know, we recognize the need to continue to innovate and to provide a solid foundation, what I would call a shrinking of our portfolio for the largest customer. If you look at the upper left-hand quadrant there, Iridium has been the only provider, -- or I should say NSA-accredited type 1 secure handset into the marketplace. That's been a pillar of our relationship with the. It underscores our contract, it underscores our relationship and we've utilized what we've called Iridium 9505A phone for several years.

And in coordination with the Department of Defense, NSA, as well as some of our industry partners, we have a strategy that we intend to implement beginning this year to replace that 9505A handset in the NSA-accredited module utilizing the 9575 Extreme and what this provides is it allows the war fighters to take full advantage of all the location-based services that comes with a 9575 extreme. So, we'll continue to use the 9505A for the next couple of years but anticipating early '17 timeframe but will have a new follow-on secure handset available in the marketplace.

In the upper right-hand quadrant, we began a campaign several years ago, you know, and Scott will come up in a few minutes and talk about the evolution of our satellite constellation, also paralleling the evolution of our ground based infrastructure.

We knew it was important for the, you know, our US Department of Defense to recognize that they needed a plan and make the same investments to their government gateway and I can tell you here today that by the time we have our first launch later this year, this gateway will be upgraded in order to support all the capability that NEXT will provide. So, we're excited about that but we're not stopping there. There's going to be a continuous need for constantly improving their security posture through gateway and they look at Iridium to be the key provider of that from an information assurance standpoint as well as future service enhancements that we plan on launching and providing to the war fighters.

In the bottom left, netted Iridium. This was a huge success for Iridium going back to 2009. It satisfied a significant problem that the war fighter had in very challenging environments like Iraq and Afghanistan. And as result, they made investment into Iridium to launch this capability to provide a push-to-talk, both voice and data, for the dismount of war fighter and it actually resulted in 10,000 plus radios being deployed into the Middle East area.



But because of the urgency around that, we relied on the deployment of what I will describe as a geographically constrained net of about 250 miles. And since then, over the last several years, we worked hand in hand with the Department to evolve that and expand that into a global netting capability, such that we're offering right now with commercial push-to-talk.

And so, I'm here to tell you that in 2014, we saw a little bit of incremental funding. Like I've said, it's very challenging budget environment for R&D dollars but in discussions with the new program office with Endesa and the demand coming in from the war fighting community, we're confident that this capability for global net will be deployed at the government gateway by 2016.

And in parallel with this, what it also offers is historically the war fighters have relied on a single-purpose handset that's manufactured by one provider out there today, one of our partners and what this new arrangement will provide is it will leverage the Iridium 9523 transceiver as the core transceiver for all future tactical radio manufacturer. So, it gives them the ability to integrate Iridium into the existing tactical radio market from a hardware standpoint and we're also working with them as you look into software-defined radio market and I'll talk about that in a little bit.

And then on the bottom right quadrant, we can't say enough about our strong leadership role on the M2M market. As we see the growth on the commercial side, we're paralleling that on the government side as well. And again, this is driven a lot by reduction in size, weight, and power of the transceivers as well the reduced cost.

And also, launching services like Iridium Burst. Again, service offering that can't be provided by any other network out there because of our global footprint, it provides a very strong powerful signal to provide a sure delivery of content anywhere in the world to either a single device or countless, thousand of devices receiving the same broadcast.

So, again, I mentioned that our current contract generating the \$400 million over the next five years is solid but we're always looking at helping the government satisfy a lot of their requirements. And as a result, we anticipate some significant revenue occurring over the next few years as a result of this.

So, I've highlighted a few here, first and foremost, the Iridium Certus broadband. Broadband services was not included in the \$400 million fixed price contract. And so, as a demand and need for bandwidth continues to increase, we're positioned well with the launch of NEXT and with the launch of Certus broadband to take advantage of that.

And integrating that into the government gateway and into that airtime services contract, we anticipate, we'll capture a large part of that market and drive significant revenue in the near term.

In the area of tactical radios and software-defined radios, predominantly, these radios provide a line of sight capability. So, as our US military has a challenge of going beyond that and providing a beyond line of sight feature, so does the international MODs and international defense organizations.

And so, if you look at the total market size of tactical radios in the marketplace, it well exceeded millions of radios. And so capturing a portion of that, we believe we'll drive, you know, incremental revenue, for us either through a hardware integration or through a software integration.

The last one there at the bottom, the government continues to face the challenge and it's really growing over the last couple of years as they rely on GPS to support a lot of their critical missions and the challenge with that is that GPS becomes more vulnerable not only to intentional but also to unintentional reception issues such as attenuation or in the case of intention of concerns where adversaries could potentially jam or spoof the signal.

One of our partners at Telus approached us and since then, we've developed a capability to leverage our high-powered paging channel to provide a broadcast capability supporting both position and timing signal to the devices and what this does is actually augments and complements the GPS signal.



In addition to this, they've also looked at utilizing location as an additional authentication factor for managing cyber security issues. So, whereas you need to notify who you are and what you are, now beginning to provide where you are to help authenticate you as a viable or authenticated or approved user of the network, we believe in the area of cyber security, this has a lot of potential.

So, again, these are just a few of the various opportunities that were - that are underway with the US government and the Department of Defense that we believe will actually drive from significant revenue for us over and above the \$400 million contract.

So, I'm going to sum this up. I like to leave you with a couple key thoughts. Our relationship with the Department of Defense at this point in time has never been stronger. We're growing at the fastest rate than we ever had in the 15-year history and a lot of this is supported by very unique network and because of that relationship and because of this network, we don't believe that it's a great concern, that it's going to be challenged in anytime in the near future.

The contract that was put in place was doing exactly what we hope it would do. If you're driving adoption and striving usage and you see that from the messaging and from the policies of coming down from the highest levels within the Department of Defense about utilize this contract, utilize the enhanced mobile satellite services, utilize Iridium and that's what we're seeing and we expect to continue to see that.

And that really positions us well as we move on to the -- as we start talking with the government, looking out well beyond 2018. As I mentioned before, with the multiyear budget environment that they're in, they're trying to understand so what's going to happen beyond at the current contract, what's going to happen beyond 2018? And we've already began some preliminary discussions with the government on that because we want to make sure that they have a comfort level from a continuity standpoint that Iridium is going to continue to be and support them on a critical missions.

So, with that, I thank you for your time and I'll go ahead and turn it over to our chief operating officer, Scott Smith.

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**Scott Smith** - *Iridium Communications, Inc. - COO*

So, we're going to start off today with where we are. It will be two months from now, we're going to celebrate our 18th anniversary of the first launch of our first generation satellite. It's an unprecedented technical achievement to build a constellation that's lasted that long and provided that good of service and is still going strong today.

After 18 years, we still have a current network that is healthy and performing well. I have a slide in a few minutes that will show you just how well we are performing.

High availability, robust service, and excellent quality for our customers have been the trademark of our network for quite a long time. The network is still very flexible and very resilient because of the nature and it was mentioned earlier by Bryan Hartin because of the nature of the design of the constellation architecture, any intermittent issues we get on any satellite can quickly pass over a user on the ground. It can go anywhere from one to eight minutes would be an outage if a satellite has an issue and that's a very strong architecture. No geosynchronous satellite system can do that because they tend to have single satellite coverage over large areas and when a satellite has an issue, you lose that whole area of coverage.

We still have a spare available. We've had the spares in the past that have come in to use and if we've had an outage of one type or another and most customers don't even see those outages because of the way we've got the whole thing architected.

So, we're going to continue in NEXT with the same type of constellation. And when this was designed in the early '90s, one of the driving requirements and it's mentioned a lot in different forms is continuous global coverage. Motorola was a heavy part into the telecom industry. There was lots of issues especially in the '90s with incomplete cell systems, incompatible cell systems, no coverage at the poles, no coverage over the oceans.

And so when the constellation was designed, that thought was in mind, Continuous global coverage. And it's what makes us different today. It makes us really unequaled in providing the various types of service that we do to all of our various customers.

We usually don't show the statistics but I thought I'd share it today because I'm actually very proud of it. This is what we call service availability of L-band availability. It's the measure of as you try to make a call, what's the percentage chance globally that a call will get through on the first attempt.

This is the last six years of service and I think we've been open about time periods when we lost satellites. And I challenge almost anyone to look at this type of performance and tell us at what point did we lose satellites.

It's outstanding service. We had typically average 99%. And right now, we have our whole new generation of satellites coming. We still have one spare with the first generation so we feel very, very good about continued ongoing network stability with no glitches at all that would affect our set of customers.

Many people have trouble envisioning what does a LEO constellation look like, what does it do and how do you route a call from one point to another. So I included this demonstration. He's an aircraft user. It places a call. The call goes up to the satellite that happens to be over the aircraft at that time.

It then gets routed around the network, taking usually the shortest path-type algorithm hopping from satellite to satellite until it gets over our commercial gateway which is just a few miles over here in Tempe.

Down links to that gateway and that gateway is the connection out to the commercial PSTN, commercial phone service out to the cell network or back up to the constellation, we can skip the gateway then we do a point to point handset constellation call between two users.

So I think it's a -- it's an effective way because sometimes because of the geometry of everything, it's like I don't understand how a call actually works, and hopefully, that's a good demonstration of how a call actually gets routed around the constellation.

So less than one year ago for launch, we started the program in June of 2010. We had our first investor conference in November or December of that year and we had a long roadmap in front of us.

It's been four and half years heading on five years. This is the most exciting year for us. We've got -- of our \$3 billion program, we've already spent 1.7 billion to-date in spending, getting everything built out.

A lot of the backend spend is all with the launch vehicles. So we have, as we all know, eight launches coming up between this year and 2017.

The ground infrastructure is complete. So there was a lot of upgrades we had to do across all of our facilities, we had to upgrade all of our antennas. We have 26 antennas and upgrade all of the antennas around the world to be compatible with the new satellites.

And right now, you'll get an opportunity to see this afternoon a set of satellites being built and we're in final system test, software test and integration test with those set of satellites. So we're teed up for NEXT, we're waiting for NEXT, our first-generation constellation has really served us well but now, it's time to move into the future.

So what is Iridium NEXT? Obviously, there is a picture of our new satellites. For those of you who are familiar with our old satellites, they look very different than the old olds, but functionality, they provide the same functionality and a whole bunch of new stuff that has been talked about this morning.

So what is this constellation in concept that we -- how much are we changing? We're not changing really anything in the architecture. This is a satellite for satellite replacement of our first generation which we call Block One, our first generation satellites.

So as we launch these, we will actually take a satellite up, move it into position behind the existing satellite and in sort of a flip of a switch, deactivate the old satellite, activate the new satellite, the next satellite and the user on the ground wouldn't even know that they're now talking to a new satellite instead of a legacy satellite.



So I mentioned it retains the same architecture, 66 operational satellites. We'll have one spare in each plane which is -- provides us a really robust architecture and nine spares that we've built on the ground. Those are for longevity to continuous constellation, you know, for 15 years or more.

We're starting launching and towards the end of this year, October is our first launch right now and we'll go then if -- I'll get to the different launch vehicles with you but then we move into a series of launches in 2016 and 2017 and plan to complete 2017 the deployment of the constellation.

Primary -- one of our drivers besides this continuous global coverage when we filled the NEXT was that it has to be backwards compatible. So we're not a cell phone market, we can't afford or we don't want our customers that have to buy a new device every two years.

So every device we've ever built will work with the new constellation. Obviously, to bring on all the new services, new options and everything we will bring, new devices will be needed and I think with Bryan and Matt and Scott have talked about all the things that we have planned and based on the new platform we're bringing forward.

In the fundamental, besides just building another Block One constellation, we know we needed a lot more horsepower on orbit so we have a lot of increased capacity, we have higher data rates and the ability to bring hosted payloads to the market. So those, we're also driving, we needed to do faster and more than we had with the legacy constellation.

So technology evolution, this was planned right from the beginning to be a technology evolution platform but we couldn't afford obviously to turn the system off and say, come back in two years when our -- when our new satellites are in place and we will re-activate the service.

So seamless integration is key and as I just mentioned, we're going to be transitioning on a satellite by satellite basis with each launch to bring the new satellites onboard. So for a couple of years, we're actually going to have a hybrid constellation.

And people will be under a Block One satellite, will be under a NEXT satellite and they really wouldn't be able to tell until each bring the new services online. And even with the first platforms we're going to bring out, they will be able to switch modes between the legacy constellation and Iridium NEXT.

And so what I mean is if we have a broadband platform, it will take advantage of both the open port pilot architecture and then the NEXT service broadband platform and switch back and forth. And the user really wouldn't be able to see the difference between the data rates. It will be just like when you are in your neighborhood and the cable modem gets real busy because your neighbors are all streaming from Netflix, you really can tell the difference in most cases.

So implementing a continuous and methodical evolution as I mentioned is really -- was really key to the whole design, satellite by satellite replacement, backwards compatibility and legacy services that we've offered for the last 15 years will continue to work into the future complemented by all the new services that we'll bring out.

So how are we doing that? As I just mentioned briefly, we have a lot more horsepower in these satellites, the satellites that were built in the 1990s. If you just think about general computing environments in general, what your phone can do now, it has -- you know, probably the processing in your Smartphone than the shuttle had in 1980, and not exaggerating.

And so the new satellites have a lot more capability. It can allow us to provide enhanced voice quality, expanding capacity, higher data rates. We'll have a whole series of products comes out that can support different data rates.

And into the flight computer that's on the satellite, there are much more sophisticated types of modulation and data compression, and that's the platform that's going to enable these new services to drive forward.

We're also working on the chipsets design right now. This is really be -- going to be able to work with our partners. There'll be a variety of products that our partners can buy from us to enable their services, really down to a bag of parts if they choose. And that will enable them to get a jumpstart on our -- on our future products as opposed to starting truly from scratch.



And then, of course, there's been a lot of discussion about Iridium Certus broadband. That's very exciting. We're going to have a whole host of data rates in different products and different form factors enabled by the horsepower that we're bringing into this new constellation.

The ground systems, I said a moment ago, they're all done and are -- they're all ready right now. The antenna architecture and the gateway are all ready to take advantage of the higher horsepower. So it's just getting our satellites launched and getting the new products built and it's going to be a really fun evolution over the next couple of years.

So I want to just spend one slide talking about the team. The team is -- because I'm so proud of them. We have a small team, there are 35 people on the Iridium team. And I sat down one day and just computed how long we have people in -- working in the industry whether it's the kind of advanced telecom or aerospace industries. And it's something like 540 years, so tremendous amount of experience bringing systems like this.

I have, you know, 10 or more people who actually worked and I was one of them who worked on the Block One architecture back in the '90s 20 years ago. And because we've done this once, because we've launched the constellation once, we built satellites on a production line, we know a lot about how to do that.

And that brought some tremendous lessons learned that we work with Thales on thinking about -- thinking about the design for manufacturability, design for production. These are things that we struggle with in the '90s. But, you know, once you do something once, you start to get good at it.

And so we've -- we put a lot of that fore thought into it, into bringing this new information forward and how we're going to get these satellites produced. You'll get to see a great example of it this afternoon. You'll see our production factor at Orbital Sciences that's over in Gilbert just a few miles from here.

And you'll get to see how it's laid out in kind of an assembly line of satellites. There are 15 stations, every station has a purpose of assembly or test in a kind of fun to watch. We have five satellites being manufactured, a sixth spacecraft parts we're supposed to show up. They may be there now.

And then we have piece parts components for, you know, sometimes as many as 20 satellites have already showed up in the storage room over at Orbital. So it's just nice to see now finally hardware especially for like -- a guy like me who spent years doing design and design review and checking all this, and then the real equipment starts to show up and I'm excited to be able to share that with you, guys, as you'll see this afternoon.

So while we have a ton of experience with our team, we didn't do it totally alone. As part of our agreement with the banks, they wanted a due diligence function put in place. We have a company called Summit Space Corporation and they are an independent checker, if you will, that reports in quarterly to the banks.

So as we go through all of these complicated and sophisticated design and checkout, we actually have another set of experienced guys reviewing all of our documents, going to all of the design reviews, discussing issues that we might have.

And they -- and they provide that function back to the banks and give them their opinion and so far, it's been -- you know, he has been right with us. It's been excellent. Our relationship has been very good and there haven't been any issues that have really slowed us down.

Besides the teams, here is the first tier of suppliers, we call it the Iridium NEXT mission team, 30 top tier suppliers that are working with Thales Alenia Space, our prime contractor. And you see a lot of big-time names in there and it makes you -- gives you a lot of comfort knowing I have so much experience, so much aerospace, spacecraft experience in putting this team together and building out this very complicated system.

It's a global initiative. All the blue dots are where some of these major manufacturers are. As I mentioned, there was 30 of these first tier suppliers. If you look under them, second tier or third tier suppliers down to the parts level, there are 100s of companies and 1,000s and 1,000s of employees were aligned, involved in this initiative.

We actually have a company, Mitsubishi, over in Japan that builds the substrates for our solar arrays. So really even though it's heavily European and US-centric, it is a global enterprise.



And the red dots we have on here are operations locations. We have our headquarters out on the East Coast near our satellite network operation center in Ashburn, Virginia. We have our gateway here, commercial gateway.

What I haven't included on here is we also have gateway out in Hawaii. And soon to have another gateway in Russia, in -- Russia is where all the antennas are.

And again, all four northern sites give us continuous access to the constellation. Because the constellation is really netted -- meshed, if you will, we have access to every single satellite, its telemetry, its state of health at all times through these northern site antennas primarily.

So a little detail, the new -- how do the new satellites look? We put a little model out on the table with some of the equipment we were showing out there. Unlike the original satellite which was a long cylindrical vehicle, it had three main mission antennas that pop down those three providing coverage to the sphere below it.

This satellite has a -- I'm pulling up here -- this satellite has a single main mission antenna right here. It provides full coverage over the earth below it. That antenna aims at the ground so the spacecraft bus, if you will is it flies orthogonal to the ground and then that's what's providing the service, all the L-band services.

It is a -- because it is meshed, it needs to talk to all the satellite around it or satellites around it. So we have two types of antenna. We have what we call a north-south antenna or a fixed set of antennas. These are the crosslinks. They are in the front and back of the spacecraft.

And those talk to the fore and aft satellites in front and behind each vehicle and the entire orbit, they talk to those satellites. They're always in communication. And then we have a set of east-west or movable crosslinks and those talk to one satellite in either plane.

So each satellite over the -- most of the orbit is talking to at least two satellites and then when they're not over the poles, we're talking to four satellites. That is what enables the low latency flexible routing.

They can always find the shortest path on a phone call so that, you know, in the milliseconds that that call transfers around the constellation, it seems -- it seems -- it sounds totally like real time. And this is fundamentally different than talking to a geosynchronous satellite.

A radio wave takes a quarter second to get it -- to get up to GEO and back. And so in many situations, if you're talking on other satellite phones, you get almost into a walkie-talkie mode where you have to say something, there's a slight delay and then you hear the response back.

This is just like talking with any landline or cell phone. It's continuous and it's all because these satellites are cross-linked together. A lot of people especially in the past would call these small satellites. You know, small satellite today means something very different, things that are small little cubes or boxes.

This satellite, when these wings are deployed, and I'm not sure if we'll see one today, hopefully, we have one in the solar array deployment test, but this is 30 feet across here. The spacecraft bus is 10 feet. You know, this 860 kilograms is like 2,000 pounds so it's almost the size of a small car so it's really not a -- it's really not a small satellite.

And of this is a 164 kilograms of fuel. That's more than enough fuel to get the spacecraft up to its operational orbit, maintain life for 15-plus years. Actually, there's more than 20 years of fuel here, be able to change orbit planes one time because drifting satellites between one plane and adjacent planes is one of the robustness features we have in the whole constellation.

Over the last few years, we've actually used in a number of times, we have a spare in one orbit plane and we have an issue with another, and so we start the satellite to drift. It takes about a year to drift but it comes back in the place, you know, and fills the hole around it. That gives the spares even more flexibility. So we have plenty of fuel to do that and then the remaining fuel is used to de-orbit the satellites hopefully 20 years from now when they're end of their service life.



A little bit more detail, what's interesting about these satellites and what's kind of extremely fortunate for us is they have way more redundancy than the current block of satellites. One of the focuses of the original block design, Block One was lots of flexibility, lots of re-configurability, software flexibility, re-programmability, and all of that really played out to our advantage over the last 17 or 18 years.

In addition to all those same features, this satellite has a high level of redundancy, so almost every major subsystem has an A-side and a B-side. And what's great about that is if the A-side last for 10 years or 12 years and starts to have an issue, you flip to the B-side and the B-side in effect doubles that type of lifetime.

So we put a lot of robustness in this and we put a lot of sort of safe mode, follow-up mode. It's a really, really stable platform. I can't wait to get the first ones on orbit and make sure we check everything out.

So another one just for a size perspective, in integrating with a launch vehicle, you build mockups and those are two designs to test integration capability, environmental testing, et cetera. This is the mockup that we build for the next satellite, here is the guy standing next to it, one in the technicians, and you can get to see the relative size of the spacecraft relative to human being.

You'll get to see this this afternoon, this is a picture from up above, maybe we wouldn't be able to get to up -- get you, guys, up to the window where you get access right here. But here are five satellites under production.

And the loop kind of goes around like this and comes back as the satellite gets put together. As I mentioned, there are 15 stations. One of them is a re-work, so if a satellite has an issue in production for some reason, we take it offline, we put it in this rework vein and try to troubleshoot it and find out what's going on and not slow down production at all.

People think of satellites taking years to build and they can take years to build. At max rate production, this factory has to produce four satellites in one month. And, you know, to build as many as we're building, to get them launched as quickly as we're launching them, you've got to be able to produce them quickly.

We're in the lower rate, LRP, the lower rate production phase right now which is building the first five and we really proved out the production process during the LRP. And then we get the high rate production.

And through here, the satellites still always be seven or eight in production and we'll crank through pretty fast. Down here is the main mission antenna in the test fixture. And here is the spacecraft bus where the technician working on it just again, for sort of size complexity.

I'm hoping you get to see this, this is very cool. I actually don't know what's going on in this area right now, but we had our first deployment test for the solar arrays. So we're on the launch vehicle. These arrays are folded on half and they tuck in against the side.

These control arms are not nearly strong enough to hold the arrays up in 1G, in gravity if you deploy them, they would just collapse. They're designed to fly in space and 0G.

So we have to have a very complex test rig which you can see up in here that essentially offloads, it takes 1G, offloads the solar arrays but doesn't hang it up enough to offset the motion. And you do that then so you can do the deployment in 1G and make sure that it all works and we just -- we have our first successful deployment of the solar arrays and it's an exciting time. It's when the trickier motions that you do when you deploy a satellite.

Here is the Orbital factory. This is -- it's great location because it's five miles from our offices in Tempe. And we have guys running back and forth here all the time. I have one engineer who is full-time there in that facility just reporting on what's going on, give us daily status, what issues have come up with what vehicle. And then some of the key managers on my space segment team are here every day. And so, you know, we are integrated in lockstep with these guys as they -- as they build our satellites.



So let's move over to launch vehicles for a minute. As Matt said --excuse me one second -- we're looking like geniuses now taking the Falcon 9 and taking SpaceX. But in 2010, there was just lots and lots of concern and speculation, who were these guys, you know, who is this guy, Elon Musk, you know, coming across sort of the brash entrepreneur, trying to start up all these new companies and taking on such, you know, big challenges.

But these days, no one even really talks about them. We signed this contract in March of 2010 and they hadn't even launched the test flight yet. And when we had our first investors meeting in May of 2010, they had their first launch which was a demo launch like the day before the meeting. And it made that meeting go way smoother than if they would had a failure.

So to-date, there are 16 for '16 in launches. We're going to use the Falcon 9 to launch 10 of our next satellites at a time. So it's -- you know, a lot of eggs in one basket and we have to have confidence.

We're going to launch out of Vandenberg Air Force Base where some of the Block One satellites were launched. It's in California. And it's good that we're going out of this space. Most of their launches are out of Florida and the missions that they send up to geosynchronous orbit are in Florida.

And all of the missions that go up to the space station, the cargo resupply missions go out of Florida. So that base is very busy. And if there is issue with a satellite or a cargo or payload, it can actually delay you if you're there.

We don't have too many launches challenging us here. There are two or three that are with us during our launch deployment phase. So it's good, so we should have our time there, we shouldn't have too many people pushing us if we need a little -- spend a little bit more time at the satellite.

And by the time we launch, we'll have over 20 missions that have already flown before we launch. So if they just keep doing what they're doing, we'll have -- we have wonderful confidence now and this should be a smooth sailing.

The other launch vehicle we're going to use is a Dnepr rocket. It had the designation in the past of an SS-18. It was a Russian ICBM. Most of which were probably pointed at us at one time. And so this is obviously a much better use for it.

It's launched out as Yasny, Russia in the southern high step country of Russia that's sort of desolate and not very attractive, about five miles from the Kazakhstan border.

And it's been used for a number of years as a commercial launch vehicle. It's very interesting because they're retiring this whole fleet. Most of these were built in the 1980s and they can get rid of them two ways.

They put them out in the field. They cut them up into a bunch of pieces and then our reconnaissance satellites fly over, look at them and say, "okay, check that one off," and, you know, and they get credit for it. This is all done under the STAR treaty.

Or they can launch -- they can modify the top end that they call this the space head module, the interface equipment, the fairing and they can launch commercial payloads and they don't have to cut them up and they can make money at the same time, so it's much better thing for them to do.

And the Russians have a lot of rocket experience. So these things will launch any time. They don't understand slowing down for weather or things like that.

And they launched in a unique way. Most satellites sit on the ground on a launch pad and go because these were ballistic missiles they launched out of hole in the ground. And I have a little video to share with you in a minute. It's -- so let's do it right now. I'll talk first about deployment. We'll get to the video then.

But they launch out of a hole in the ground, a gas charge pushes them out of the ground and then they light their motor and there is a moment there of suspense why you want to make sure the motor lights.



Here is the different deployment capabilities we're going to bring. First, we're going to launch these two satellites, you know, make sure that we have everything working perfectly in orbit. It will be the first launch.

And we packaged two in here and they deploy, they actually spin the rocket, top of the rocket around and they deploy out the back, they drop the two satellites off and then the satellite start to do their deployment and autonomously go sun pointing.

We'll leave these satellites in orbit for about four months, again, it's the final checkout period for us. There are some requirements that we want to buy off on orbit. And before we start going in this whole series of launches of 10 at a time, we want to make sure absolutely thorough that our testing was good, we called out everything and these guys are working perfectly.

The key point before we start launching the Falcons is these first two satellites have to be up and operating in the current constellation. So they'll be the first ones up there and we wouldn't push the launch button for 10 until these satellites are carrying a full service load supporting all of our products and that's the ultimate test, that's how you put them under a complete load is you get them operating in the constellation with all the rest of the first generation satellites.

On the Falcon 9, we launched 10 at a time. There are two platforms here of five each. And once the ferry comes off, you get the operational orbit then the upper stage will start deploying satellites one at a time.

You know, the spacing between the satellites, they'll go, you know, autonomously, go into their normal mode already and we'll start to send commands about which slot do we want you to go up into or we're going to send you in a drift orbit.

So here are some of the facilities. As I mentioned SpaceX, this is a great facility. They just built this building within the last two years. It's a new vehicle integration facility, lots of room, very modern, a very great place to work.

So all the satellites will get shipped by truck from Arizona over to California, show up in this building and we'll do the final fuel loading on the satellites and then put them on those dispenser stages and get -- taken out and mounted onto the rocket.

So in Russia, it's not quite so nice. This is -- this is the -- this what all the land around for 1,000s of square miles looks like. It's sort of -- they call it the high step. It's very barren, and not very attractive and that's probably why they moved it out there, it's because it's so remote.

We deal in a few places. This is out of the Yasny launch space. They've got -- they have built a very first rate facility to do satellite integration. It's connected to a hotel. There is a little town next to it that's not very nice, but they built a lot of very modern hotel.

And what's really kind of -- kind of cool is that because the weather can be so cold there, they actually have a walkway that's covered so you can go from the hotel, have breakfast, go into the walkway and go over to the integration area without ever putting a coat on which in this part of the country is really smart.

This is in Ukraine. This is the Yuzhnoye Design Bureau. There are two companies we deal with -- deal with down there in Dnipropetrovsk, Ukraine. One is Yuzhnoye. They're the engineering design house. And another one is Yuzhmash which is the mechanical builder, they actually build the hardware.

So here is the launch, you'll see this pop out of the ground, pause for a moment then the engine lights and takes over. So it's pretty impressive but there is that sort of pause when it's launching.

And it's a way better use of this to launch commercially than I just think of like, you know, Terminator 2 and all these things are launched -- aimed at us.

So they have -- they flown about 20 flights. They had one minor glitch on one of the flights that wasn't rocket-related. It was software-related. Other than that, they've been perfect. They had two -- they set a record on this launching the most number of satellites at the same time because they



do lots of little strap-on cube sets, the small sets. They launched 37 satellites on one of these rockets at one time, and all of them worked. So it's a very good capability. It's great that it's available. And it will fit perfectly for our first launch.

So probably, one of the most frequent questions I get is, well, how do you actually deploy these, you know, you have all these rockets and they carry different number of satellites and, you know, how does that actually work.

So I put a little animation together here that shows this. What you're targeting, remember, is some tying it over with the first one and then deploying the constellation as fast as possible.

So there are two types of placements we do in these satellites. We either send a direct injection into the orbit plane that it's going on or we drift it to one of the adjacent orbit planes. And we drift these because, you know, the number is with 10 at a time and two. It doesn't match what we needed in all of the orbit planes. We have 11 satellites per orbit.

So what you'll see in this is we start to deploy these and then we get the drifters going very early because it takes a year to drift the satellite between one plane to the next.

So here, we have the first launch and rocket takes off, those two satellites go into whatever plane is necessary. You know, we'll do figure of merit of which planes are strongest relative to satellite health and we'll launch those satellites, they'll direct inject in that orbit, that's done.

So the next launch, we launched the Falcon 9, all the satellites go up, in this case plane 2, and we start to send two of them on a drift over to plane 1. The other ones remain directly in plane 2.

We get into 2016, we have another Falcon launch. This one is targeted in plane 3. And instead of keeping all 10 satellites there, we drift four of them in one direction and four in the other.

Another Falcon launch in 2016, injects into plane 5 and we send those drifting to six and two. This is all a notional -- notional scheme of how we're doing -- how we will actually do it.

So you can see we have drifters, have set up in all these first sets of orbits. We're moving ahead to their final location.

Another Falcon launch in 2016, it goes direct inject, all 10 satellites stay in that plane and with the two drifters they got there, we're done, so plane 5 is done. The first launch in the 2017, so this launch into plane 3 and again, they all stay there, they complement the drifters, they got there first, that plane is done.

Now, out in 2017, that drift that started, those planes -- those satellites get to plane 1 where they're targeted and now, they stop the drift, they move into that plane and they're operational.

The next Falcon launch goes into plane 6, they all stay there because now, we can't be -- afford to be drifting anymore because we need to get Aireon service, for example, turned on as quickly as we can. If we started drifting late, satellites would be, you know, out in the late 2017, 2018 before everything is finished.

Final launch into 2017, this one fills out plane 1. It's now complete. Now, the drifters start to show up from that second launch and they complete plane 2. And the final drifter show up and they complete planes 4 and 6 at the same time. So that's sort of an example of how we're going to do this.

One-- you know, one slide here on hosted payloads, the important thing here was this was built into the design right at the very beginning, the ability to hold host of payloads. We didn't know what was it going to be. There was, you know, 30 ideas but it was important to build in the features.



So we -- so we reserve the spot location. It was originally 50 kilograms, we've upped that to 65 kilograms. We gave it like a giant shoebox size, we gave it a set of power and we gave it a piece of our data rate in the network in order to relay its telemetry whatever it might be at the time.

This has all become Aireon now, Aireon and some various payloads and Vinny and Alan will tell you about that in a minute.

Okay, this is -- I used this exact slide, for those of you who are with us in the end of 2010, I used this exact slide with you like five years ago, four and a half years ago. And it looked exactly the same with one exception, the schedules we laid out, the spans we laid out, none of this has changed. And so I'm very proud of the execution of our, you know, distributed team in pulling this whole project off.

What's changed here is in 2010, you were to see the first launch in the -- at the end of first quarter of 2015. We had to move out a few months here. The launch is still in 2015, but on the scale of the size of this project, I think this is just fantastic execution. And we're looking forward in getting into this phase and starting to, you know, stop building, stop testing, start deploying satellites over the next couple of years.

So that's it. We're actually down to the seven months and counting and, you know, I've been at Iridium now five years. This will be by far the best year that I'm going to be here because this is when all the fun happens.

And with that, I'd like to introduce Vinny Capezzuto, Alan Khalili from Aireon. They will cover the next section.

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**Vincent Capezzuto** - *Iridium Communications - CTO, Aireon LLC*

My name is Vinny Capezzuto. I thought I'd stop before getting into the actual slides what my background is. I came to Aireon six months ago. I had 30 years experience.

Most of that -- some of that was in manufacturing, about 15 years. And the 18 years was in the federal government. I worked for the Federal Aviation Administration. I was basically their director for air traffic management systems.

My background is in program management and systems engineering. Part of my portfolio at the FAA dealt with all the surveillance systems so their radars and ADS-B, the automation systems that the controllers use to separate air traffic and also to make sure that there's efficient flow in the air space.

Part of the strategy for the ADS-B program, I was, you know, the director for that activity, was not only to build the business case required to fund, let the contract, in fact, excels from the vendor that receive that contract for the ground infrastructure.

But it was also to develop the avionics that the airlines would have to put into their aircraft. And so we had to up the standards, we had worked that from the perspective of harmonizing it across the globe, kind of make sure this should be interoperable. It wasn't just for the United States.

And lastly, I was the designated federal official for the rulemaking which translates into a mandate. So essentially it's law, 2020 January 1st enter the air space in the United States, you have to be carrying ADS-B avionics.

So that's a -- I just wanted to give you that as a setup. The next slide really is a good video that it kind of gives you a quick high level perspective of Aireon is doing.

(Video Presentation)

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**Unidentified Speaker**

Technology is once again revolutionizing the world of aviation. Since the Second World War, Radar has been the primary method to monitor aircraft movement beyond the line of sight and it remains so until today.



In recent years, ADSB has become a widely accepted alternative for air traffic surveillance, providing critical information to controllers and pilots. Current ADSB and radar systems are limited to land-based areas, leaving vital airways, over 90% of the world, uncovered by any real-time surveillance resulting in inflexible and inefficient routing over much of the world's airspace.

These global blind spots will soon disappear. As early as 2017, ADSB receivers on 66 cross-linked satellites will relay signals from all ADSB equipped commercial aircraft through the Aireon ground facility to air-traffic controllers worldwide.

Aireon will extend ADSB capabilities to provide accurate, real-time visibility of ADSB equipped aircraft in any flight information region, including current procedural oceanic, polar, desert and mountainous airspace.

Space-based ADSB will enable the optimization of flight paths and altitudes, increasing operational and fuel efficiency for airlines.

Aireon will increase ATM efficiency and capacity as well as enhanced aviation safety, all while lowering infrastructure cost for ATC providers. The system will leverage existing investment in ADSB technology and helps ANSPs, airlines and regulators meet future global infrastructure demands.

Aireon, transforming the way you see the sky.

(End Video Presentation)

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**Vincent Capezzuto** - *Iridium Communications - CTO, Aireon LLC*

So it gives you a pretty high level feel for what Aireon is attempting to do. I thought I would take some time to do the 101 in air traffic management. I'm sure most of you who flew here today, you could realize how complex the global aerospace system is.

It starts off with the low -- the -- back at the left corner there where someone has to file a flight plan. So most airlines have a dispatch center. An airline has a plan and they put together and says, "Here is the wave points we're going to apply in the -- you know, the highways in the sky and this is the time we plan to be at these particular wave points."

And essentially, it's just a big orchestrated sequencing of the aircraft through the -- through the air space. When you -- when you start with your plan though as like anything, it's just that's all it is, it changes along the way, the weather creeps in, all kinds of activities creep in.

And, you know, you have to deviate from the plan. So from takeoff, leaving, taxiing out of the air -- out of the airport, things are looking pretty good. You get up into the air space and that's when the deviation starts to occur.

And the way all this works is first, it's starts with the pilot knowing where they are, right, based on their navigation capabilities, but then secondly, they have to be able to communicate to the air traffic controller so that the controller could provide some level of services.

And they do that in various forms, some without surveillance capability, in other words, they don't have the blips on the screen. So they're doing this mentally. The pilots are reporting where they are located and they kind of keeping them sequenced. And when they do that, they're making sure there's a nice big safety bubble around each airplane.

Okay, so when you introduce surveillance, anything, radar, ADS-B, even though the technology called [mobile alteration], what that does is it allows them to start to have a better situational awareness and you can -- you can close up the separation.

And so that's key to being able to provide the sequencing so that you have an efficient flow, right? You want to maintain safety which you also want to make sure that the airlines have the ability to have an efficient flow. And this is all accomplished through the integration of both technology, people and procedures and processes.

So just to kind of continue the conversation, we keep talking about ADS-B and I'm not sure if everyone has a level set on that, so let's just start with what does it mean.

So Automatic Dependent Surveillance-Broadcast, well, what's automatic about it? So the one thing is the aircraft today when they interact with radars, the radar actually interrogates the aircraft and the aircraft provides the position -- or it provides the identification of who the aircraft is and what their altitude is. The radar itself calculates the range and the bearing, combines the information and brings it over to the control display.

What's different with ADS-B is the aircraft is spontaneously emitting once a second the latitude and the longitude of the aircraft plus the altitude and unique identification of their aircraft. And it's doing that by relying on the GPS constellation. So that's what these satellites are in this particular picture.

So it's dependent on GPS to derive its location. It's broadcasting that position. And now, other aircraft or radios on the ground would be able to receive an information and then that gets routed over to the air traffic controller's display.

So on the bottom left, that's a typical -- that's Boca Raton -- that's typical radio installation for ADS-B. And if I was to show you just 20 feet by 20 feet piece of land, nice little fence around and an engine generator, has telco lines coming to it, and a pretty short hole with antenna on it.

If you compare that to a typical radar which you could see right here at the Phoenix airport, you'll see probably it can consume up to an acre of land. A lot of these are not always on airport property. They're up in the mountains. So a lot of times, you end up building roads, you have to put in power, you have to make sure that the security fence around it is robust and then, you know, it gets pretty expensive pretty quickly for the installation.

In fact, in some of my experience, as we put radars in, it took four years just to clear the property rights. It could have been some type of environmental due diligence issue. So all these things kind of add up to the infrastructure cost of establishing your infrastructure.

So in the case of ADS-B, it was a terrestrial base, it was a step forward, right, in regards to reducing the complexity plus we did a service contract. The FAA did a service contract with ITT, so they allowed ITT to figure out where was the best place to put these radio stations and they had a little more flexibility.

So they've deployed over 650 radio stations, Continental US, Guam, Hawaii, Puerto Rico and Alaska. And, you know, not all radio stations are equal. I gave you the nice, easy picture of Retone.

I could show you the pictures that we're in Alaska. And, you know, the challenge is in Alaska, you know, they have summer for two weeks and the rest of the year is basically pretty, you know, tough to do an installation.

We had crews being helicoptered up into the mountains, living in tents, putting in the equipment and then pulling out before snow came. Your challenge with those limitations and then when the system goes down during those winter months, essentially, you've got away for spring and summer to come to bring them back up.

So there are some challenges in some of our areas. The Rocky Mountains are -- you can kind of see it's a little bit of a hole from a coverage perspective of putting radios in.

We did do some concentrations in Denver. We had a -- the FAA has an arrangement with the Colorado Transportation -- Department of Transportation where they made a similar investment to help augment it.

And then the Gulf of Mexico, and I like to point that out because, you know, that was one of the more challenging installation you had to work with. You had to go broker deals with each one of the platform owners. And now, even though you've established that you recognized the lifecycle of a platform isn't forever, it could be 10 years, you then have to go renegotiate wherever they are moving it.



So now, you're moving your infrastructure around and you're always challenged with the burden of keeping this relationship with all these people so that you can install equipment out on those platforms.

And then recently, the United States has an agreement with Mexico and they were able to put three more of these radio on the Mexico side which is the first time they're going to have surveillance across the entire gulf 28,000 feet above.

So you can see it's a -- it's there, the infrastructure is there but there's an opportunity as well because one good hurricane pulls through this and they're going to be left blind again. And then if that's in the high altitude of operations, there's a fair amount of [helicopter] operations there where there are people living two weeks at a time out on platforms, you know, doing their job and needing to get home and, you know, there is a whole infrastructure in cities essentially out on the platforms. So it's pretty -- it's a pretty much needed environment for the United States.

So now, I'm going to transition into the Aireon version of providing that service. So from the perspective of the video, you saw this nice graphic. It definitely gives you a sense of how we can provide coverage globally and in a fairly easy way by leveraging off the relationship and the infrastructure that Iridium is providing.

The concept of operation comes in multiple forms. There is plenty of air space that doesn't have any surveillance infrastructure. So we could be the sole source of surveillance infrastructure. You know, think of Africa, think of the oceans, I mean there is a fair amount of space that has essentially no surveillance at all. So that would be one of our primary places that we can provide new services.

The second element of it is even if you have a radar infrastructure or even the terrestrial-based ADS-B infrastructure, you can then overlay this provided as one of the input for the automation system where they fuse all the data together to provide a robust highly available signal or information to the controllers so they can do that separation.

And that augmentation is important as well because like in Europe, they have some type of -- it's a mandate where they're expecting three overlapping radars in all places. So now, they can start to fan out that radar network.

And that's one of the areas that's definitely worth looking at because, you know, the infrastructure cost for a radar is pretty high and you can start to look at, you know, maybe you can kind of supplement the infrastructure with Aireon ADS-B and then also pull out some of those radars and reduce the logistics supply and support behind it.

And then finally, there's a third element that we're looking at which is more of a contingency particularly in the Gulf of Mexico where you could activate the service, we would certify for use and then shut it off and just keep a heartbeat going to validate that it's still operational.

And then if a disaster occurs or, you know, in a lot of cases, you know, you get backhoes, pull out cables, you pull out power lines, pull out telco lines. It takes a service out from multiple days.

So this would be a great, you know, just activate the service for the time period you need it and then when you don't need it anymore, you can deactivate it. So those are the three types of concept of operations that we're offering to the air navigation service providers.

And I just want to leverage again that there was a mandate in place as I mentioned earlier. So there's no additional aircraft equipment required. This is just essentially living in the environment that already exist where all the aircraft are populating with ADS-B to meet the rule in 2020.

In fact, Boeing off the line today, if you buy a new aircraft, it comes with ADS-B infrastructure in it. And then mostly, it's a retrofit story that the airlines are wrestling with to make the 2020 day.

So what are the benefits? I mentioned some of the infrastructure reduction costs, so from the ADS-B standpoint, your navigation service provider, they can start to look at their business models and how they provide value to their customer and they can reduce their operating cost.



They could -- in some cases, not even make the initial investment for the terrestrial ADS-B ground stations. They could replace radars, they could augment their infrastructure, increase their availability, providing better services to their customer.

From the airline perspective, this video just kind of take -- pulls out a snippet of what was in the original video and it's -- it basically just demonstrates that there's a couple of things that go on during a flight.

One is being able to get to an optimal altitude, so an aircraft takes off, it's loaded up with fuel and people, it can only get up to a certain altitude anyway. As it starts to shed fuel, it would desire to be at a more optimal altitude where they will operate even better.

And in the current status of how air traffic works, it's difficult, they don't have review mirrors, they don't know where the airplanes are around them, they don't know enough to ask the controller to take the next altitude from to step u.

In the case of ADS-B, that's -- that information would be provided to the controller. They would have much better situational awareness and they're being able to, you know, exercise the opportunity to change altitude and operate in a more efficient profile.

Additionally, the reduction in separation, so I talked earlier about the big safety bubbles, in the oceanic arena, if there is just communications with -- between the pilot and the controller with no surveillance, they essentially keep in 10 minutes apart which can translate into 80 miles.

With the advent of using other technologies, they were able to bring it to a 30 nautical mile latitude and launch and so a separation. And we believe with the Aireon capability, given the high degree of accuracy that we'll be providing the information both from the standpoint of an update interval and latency of that information to the controllers, we'll be able to get them down to 15 nautical miles separation. So that gives you the -- you know, putting more aircraft in the same exact lane for the setup already.

So -- and then finally, this -- you know, the airline operation cost not only from the fuel consumption standpoint but the reduced environmental impacts, right, so there is less fuel, less emissions.

The way -- the way we're getting there is basically having the best team in town, there's no doubt about it. I think the whole Iridium story that just kind of unfold it in front of you demonstrates the forward thinking in regards to ensuring that there was this space and the bandwidth and the power for the payload to operate on it.

I don't imagine anyone being able to take ADS-B receiver all by themselves and putting them up in space. It probably would not be a cost-effective endeavor. So this was definitely an opportunity that was leveraged.

Bringing in Harris who is an expert in regards to the development of the levels to payload, the flexibility of this payload, the leading edge technology, very experienced in the aviation world comes to mind.

And then ITT Exelis I mentioned, you know, we've talked about being able to just utilize exactly what was deployed from the FAA perspective for the terrestrial base, you know, they already have the operation center in place, the personnel train, their ability to monitor their network, just translates to me our ability to distribute this information to the globe as opposed to just the FAA.

And finally, you know, the whole concept of MH370 and, you know, the tragedy and not being able to determine where the aircraft is and not really understanding what happened and all the guesswork that's going on and still going on, I think a lot of that would be going away a lot quicker if we had the opportunity to have an Aireon system out there where you could provide that surveillance information to all people so that they have an understanding where that aircraft was.

And that really reduces the search and rescue space that you're looking in. And a good example is just two weeks ago in Virginia, right, there was a missing aircraft. And they thought it was in the Chesapeake, it was right around the storm, we had the snowstorm, they deployed the navy, the coast guard, you know, they were searching how many square miles for this particular aircraft. There was a half a mile off final in the wooded area right outside the airport, so Norfolk airport.



You know, and time is of the essence in regards to an accident. And so if you know where they are and you know you can limit the space that you're looking for those particular aircrafts in the crash site, it's unbelievable that the information that this will provide people from the standpoint of looking at it from the globe.

But not just the globe, also the mountainous areas, I mean there is a -- there is a big business here and I think in regards to providing that service, I mean Aireon and Iridium will have that information.

The way we're looking at deploying this is essentially pre-registering the search and rescue community so that they can get it. It's the right thing to do, you know, we're not -- we're not looking at this as a money-maker, we're looking at this as more of -- it's a goodwill, it's the right -- it's the right thing to do with the community. All of us fly, all of our families fly, this is an important aspect.

Then finally from the competitive environment, I mean if you kind of look at the one -- FANS-1A was mentioned earlier or ADS-C contract to ADS. While it's available, it's not mandated, so there's not a consistent equipage around the world.

It does not have the full global coverage that the Aireon and Iridium system will provide. And it also doesn't have the latency in it that will allow you to reduce the separation to the numbers I was talking about.

There's another Globalstar/ALAS system out there, ADS-B link augmentation system. And essentially, it's going to require new equipment on the aircraft. That equipment standard has not developed it. It has -- it will have another increased cost to the airlines or anyone wanting to have that. So there are things there that I don't think align well.

And then finally, any new ADS-B constellation would have to go through the major investment that you see Iridium is providing right now. And the time to launch and to align all that to happen, I mean I think the bottom-line is as you're looking at this, there's really no competition at this point. This is -- this is the provider for this particular service.

With that, I'm going to introduce Alan.

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**Alan Khalili** - *Iridium Communications - CFO, Aireon LLC*

Thank you. All right. Hi, my name is Alan Khalili. Just to give you a little background on myself, I've been with Iridium since -- or Aireon since the beginning from when we -- it was an idea that we try to find out, it was viable from a technology perspective to raising the equity.

Prior to that, I was with the Iridium. I've been with Iridium since 2008 and prior to that I've had various roles in corporate development in the media as well as telecom industry, investment banking, Credit Suisse as well as public attorney at Ernst & Young.

So Vinny was talking about the technology and we all know that in this industry, technology is that competitive edge that you need.

But in any businesses, particularly a startup, there's a couple of other things that are vital. First of which is management. You have to have a management team that can execute and we have people like Vinny on board that understands the end-users' needs and at least as it pertains to the FAA, how they approach their problems, how they go through the acquisition process.

Equally important is the investors for companies at this stage. You want active investors that are engaged. Iridium from a satellite perspective is exactly what we would want.

Scott was talking about his small army of engineers. Well, we have engineers there as well under the same roof working side by side with Scott's engineers. Also, in terms of active investors are the ANSPs, air navigation service providers. So our investors are NAV Canada, Irish Aviation Authority, Naviar, and ENAV, which is the Italian aviation authority.

What makes them special is that as investors they're also customers. They understand the industry's problems and they quickly saw that Aireon was going to solve those problems, what's important at a value proposition at comparatively a low cost.

You want them committed and our investors are committed in a couple of ways. First of all, they are 72% invested. They invested \$195 million out of \$270 million. But beyond that, they provide a lot of other support that's critical to the success that are helping when you move through the regulatory environment. They are helping us validate the system as an end-user. And also equally important is they're really helping us out from a channel perspective.

In business, you have your go-to-market strategy, your channel. And they, as an ANSP, go to industry events with other countries. And on an operational level, they talk about best practices, and then they build relationships because they are credible for remaining ANSP.

And with those relationships, they open up doors at the right level not just the CEOs who make the big decisions, but also more importantly at the operational level, the people that are going to be the end-users, the people that are really going to have the purchase decision. And I think they'll come out a little bit more in the next slide when we talk about the basically the channel and our pipeline.

So, first of all, before we go into this mosaic and walk you guys through it, I want to talk a little bit about our business case. So the customers -- Aireon customers, are they air navigation service providers? And the way the value chain really works is we provide data to the ANSPs, as Vinny said, they operate the air space more efficiently, safely.

And when I say efficiently, then there's benefit that comes out of that. The air navigation service providers have lower operating cost. But then also the airlines, they have increased efficiencies, which translates largely into fuel savings. And in particular, when you look at the fuel savings, as Vinny was saying, fuel savings come from, let's say decreasing that bubble, getting more planes into the jet stream so they're using less fuel.

First, so let's take a look at this map and I'll kind of walk you through it. But before I go into that, I just wanted to also mention really that value chain, so we provide the data to the ANSPs, ANSPs provide better service, create benefit. In return, we charge the ANSPs a fee, which you could say will be a subset of that benefit. And then in many instances, those ANSPs will turn around and charge the airlines. So that's why it's important that the value proposition is going across the entire ecosystem, both the airlines as well as the ANSPs.

So, from a basis perspective, we're really building bridges here. We've all taken flights to various parts of the world, and we're trying to improve the efficiency on these bridges in the rural areas.

So, for example, flights going from Europe to North America, from Europe down to Central and South America, going from North America all the way up across and over into Asia, between India and Asia and Europe. So these are bridges that we're building.

And then when you take a look at -- let us show you the picture as the yellow lines should be familiar. Those are the countries. Countries are typically made up of very slight information regions, and those are the white lines. And the different color scheme is green, which is signed data services agreement, which currently we have NAV Canada, UK NATS, now just those two alone Aireon is cash flow positive.

When we talk about the blue shaded areas, these are countries where we have memorandums of agreements that will transition into the data service agreement. So you can see South Africa, you can see here is Portugal. You can see India, Singapore, and then, of course, there's the FAA. And the reason why the United States is not filled out is as you've seen they said, show you their towers all over the United States. So the service areas that we'll be focusing on initially are in these oceanic areas.

And then the red countries are countries that we're speaking with, that we're transitioning into the MOA. And then the yellow regions are areas that we're going into the education process with the ANSPs.

Many of these blue areas were doors that were open by our investors, which is why investors are critical for our success in terms of building out the channel.



Okay. So in closing, in terms of Aireon, just a couple of points I want to drive home. We did not invent ADS-B. It was a technology that was developed by government such as the FAA. We're just building upon it, making it better.

We are creating potential benefits and that's just the \$500 million a year just from fuel savings alone, not even operational benefits. We're on track to be providing service. We're having all the satellites up and ready alongside Iridium in 2017. We strategically built the management team, and importantly, we've identified investors that are really contributing to the value creation that Aireon will have.

And then ANSPs are increasingly appreciating these advantages and what they bring to the table, and the FAA is no exception. We believe that their proposed fiscal 2016 budget indicates that they're interested and that they are gearing up towards signing a contract. We believe they will be in a position to do that by the end of 2016, mid 2016, end of 2016. And then likewise, we believe that between the UK NATS, NAV Canada, and FAA contracts, Aireon will be in the position to support the hosting fee payment sometime between mid 2016 or in early 2017.

So I'm going to hand it over to Steve.

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## QUESTIONS AND ANSWERS

**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Thanks, Alan. Thanks, Vinny. So we'll start our second Q&A session here. We've got time for about three or four questions. We're running a bit behind schedule. I'll invite Scott Scheimreif and Scott Smith back up.

And again my colleagues will have the microphone throughout the room. If you haven't asked a question, I would again ask that you state your name and company name.

First question, Greg?

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**Greg Burns** - *Sidoti & Company - Analyst*

Greg Burns, Sidoti & Company. When you look at the global opportunity, what is the threshold revenue market for Aireon and what does the margin profile of the business look like?

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**Scott Smith** - *Iridium Communications, Inc. - COO*

Well, in terms we view it as being an excess of \$1 billion is the consumer market opportunity. And as a private company, we haven't been going in public in terms of where we think the margin opportunities are, but we believe that they are typical of the satellite industry partly on the high end of that range.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Tim?

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**Tim Farrar** - *TMS Associates - Analyst*

Tim Farrar, TMS Associates. On Aireon, are there any contingencies associated with the payments on the ANSPs like software development on that part or months of testing needed before they start paying or is it basically as soon as you have full commercial service on the next constellation?



**Scott Smith** - *Iridium Communications, Inc. - COO*

Well, in terms of contingent revenue streams, one of the potential opportunities that we haven't really gone into is our other value-added for other data sales to other organizations such as airlines. You could see that global picture, let's say, of where all the planes are to United Airlines to improve their operational efficiencies.

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**Greg Burns** - *Sidoti & Company - Analyst*

Next constellation ready for service on, say December 2017, then do the payment start automatically thereafter or are there other contingencies embedded in being ready for Aireon service on top of that?

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**Scott Smith** - *Iridium Communications, Inc. - COO*

Oh, well, that would be contingent on the local regulator certifying the service. But let's say as it pertains to the North Atlantic track and the FAA, obviously, all of our planning and scheduling is built around that being ready by early 2018.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Other question, Chris? After Chris, we'll take one more.

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**Chris Quilty** - *Raymond James - Analyst*

Alan, just to quantify when you said \$1 billion, is that a \$1 billion a year of revenue that...

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**Alan Khalili** - *Iridium Communications - CFO, Aireon LLC*

No, that was just articulating what we believe at least the fuel savings opportunity is just from the oceanic areas. To some extent, it's hard to actually put your finger on our global basis because we are finding that the market opportunities are going beyond what we initially thought. We initially thought it was going to be just oceanic remote areas, we're finding that other market opportunities might be there that we didn't see before just because the technology is evolving.

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**Chris Quilty** - *Raymond James - Analyst*

From the ground-based ADS-B, Vinny, is it correct that the Exelis contract is something like \$100 million a year to kind of scale the revenues that the FAA is paying for the terrestrial part of the network?

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**Vincent Capezzuto** - *Iridium Communications - CTO, Aireon LLC*

Their operating cost, their operating expense, at its current form, with the infrastructure up and running is about that number.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

One more question, okay. Andrew?

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**Andrew Degasperi** - *Macquarie Capital - Analyst*

Thanks. Andrew Degasperi from Macquarie. I just had a question on the launch of the Dnepr side, it's the first two satellites. If something were to go wrong as far as geopolitical situation in Russia, will you be able to move that launch over to California?

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**Scott Smith** - *Iridium Communications, Inc. - COO*

So we would start launching 10 at a time right out of the box. The political situation is obviously a concern, but we're there all the time. I have people there. I have been there in Dnipropetrovsk. We have people there every month and it's just to keep up the communication, make sure there's no issues. And while parts of Eastern Ukraine are under turmoil, this part of the country has had no issues, so we're there all the time. But I mean, we can certainly start launching with Falcons, but that's not the current plan.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Okay, great. Thanks, gentlemen.

With that, we need to introduce Tom Fitzpatrick over our financial overview and bring us home with a look ahead before our final Q&A session.

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## PRESENTATION

**Tom Fitzpatrick** - *Iridium Communications Incorporated - CFO*

Thanks, Steve. Good afternoon, everybody, I guess, it's still morning. Good morning, everybody.

So as Matt did on the operating plan, I thought I'd start with the retrospective on the plan that was laid out almost five years ago for the financing of Iridium NEXT in 2010. And so it was anchored at the time by the \$1.8 billion facility backed by the French state, the COFACE export agency. And at the time, our trailing 12 months EBITDA in 2009 was \$134 million. So anyway you look at the plan, it required material increases in EBITDA for the financing plan to essentially reconcile. And so how have we done?

Well, if you take a look at our guidance for 2015 regarding \$230 million to \$240 million, so up about \$100 million from that level where we were in LTM 2009 or sort of 75%. So we have delivered, always required, which is material increases in EBITDA up until and through 2015. And we're not done, and we're going to talk about that more here in my presentation.

Similarly, the financing plan called for hosting fees, hosting payload payments between \$200 million and \$300 million again to make the financing plan work. And we didn't have one contract in our hand at that point in time when we announced that number as being required.

And where are we today? We have contracts totaling \$265 million for the hosting fees from various customers including Aireon and Harris. And that doesn't count the upside that we have from an approximate 25% retained interest in Aireon. And after the receipt of \$120 million for the sale back to Aireon on Iridium's interest. So it goes that we definitely delivered on that aspect of the financing plan as well. We're proud of that.

We, in concert with our lenders took a look at our situation in 2014, took a look at what our expected payments from Aireon would be. And boy, I was prudent to raise \$220 million in cash to get the project through the completion. So to put that in perspective, that's about a 7% true-up on a \$3 billion plan, so very proud of that as well.

And to say, is that true-up that we miss by 7%? Well, history is going to be the judge of that because none of that counts the equity upside from Aireon, so we'll see how far off we were. We kind of think that we kind of were oversubscribed in our financing plan, Iridium NEXT and the \$220 million represented essentially a bridge to get us to the end of the job.

And so the \$100 million of EBITDA growth that is occurring has come on the back of significant growth in our subscribers over time not just the last five years. If you go back 10 years in time, we have a 20% CAGR in subscribers over that time period.

And the blue on this chart is our oldest and largest customer of the US government. And we're proud to see that the government crossed 60,000 subscribers in 2014, and as Scott talked about were even more of a strategic provider to that customer at this point in time.

But as important as they are, our commercial business has dwarfed the growth in the government. In fact, commercial subscribers now make up 90% of our subscriber base with a significant growth coming from machine to machine, which now represents almost half of our subscribers.

We just take a look at our service revenue over time. So service revenue is access and airtime. It's recurring in nature, the highest profitability element of our revenue stream. You see a CAGR of overall of 7% over that time period from 10% to 14%. And you'll notice a couple of things.

The commercial service growth rate of 8% is faster than the overall growth. And why is that? Well, our government cost -- to those of you who have been around the call in 2012, in 2013, we were seeing decreases in our government service revenue. The troops were coming out of Afghanistan and we had to live under the terms of our former contract. All of that changed in the fourth quarter of 2013 when we redid our deal with the government and came away with \$400 million service contract that sets the table for I think an 8% CAGR as we look forward into 2018. So that's the reason for that disparity.

If we look at the commercial service revenue growth, one might observe that the 8% growth lagged the growth in subscribers, and that's because a lot of the growth in subscriber count comes from M2M, which comes at a lower ARPU, so the service revenue don't grow as fast as the subscribers.

So I get a lot of questions from -- is that M2M business as profitable as your regular business? Listen, it's access and air time. Access and air time has the same profitability kind of characteristics whether it's SPD or handheld, whatever. We don't pay a lot of attention frankly to ARPU because we don't have any cost to acquire, so access and air is excellent regardless of where it comes from.

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**Steve Kunszabo** - Iridium Communications, Inc. - Exec. Director Investor Relation

A couple of our other revenue streams or engineering is support revenue and our equipment revenue. So the engineering and support there is in blue. It's essentially more episodic certainly than our service revenue that it represents us doing engineering work principally for our government customers as they desire additional functionality that come out of our network. They hire us to do the engineering work and pay us a slight margin on it. It's not as important financially as it is strategically because many of our new product offerings often have their genesis from that type of engineering work out with the government.

Our equipment revenues is in the yellow, again not as predictable as our service revenues because they are recurring in nature. In 2014, our equipment revenue grew by 7% over the prior year. We're not calling for growth in equipment revenues in 2015. We have good new revenue sources on Iridium GO! and Iridium Push-to-Talk that will tend to push the revenues up, but we see pressure on our legacy handset business given the strength in US dollar, so we're not calling for growth in handset or overall equipment revenues in 2015.

Our practice has been if you look at what we do most notably in M2M, we take a look at what can make us relevant in M2M, and our history has been if we need to take our modem size down and cut the cost of our modem to drive certain recurring service revenue that essentially represents an annuity for long periods of time, that's what we do. So you can look for us in terms of our equipment revenue to be strategic in nature and get the overall benefit from long-term service revenues.

Take a look at the business as characterized by significant operating leverage. Simply put, as we bring on additional minutes of use, which is additional service revenue access and air time, the variable cost associated with that are very low, and so the business is characterized by a significant operating leverage.

What you saw in 2013 and into 2014 was sort of a flat EBITDA sequentially from in those two years. We undertook a significant expenses associated with the warranty cost in our maritime product, Iridium OpenPort, that pressured the EBITDA margins in 2013 and 2014. We expect those expenses



to go away in 2015 as that product is now fixed and performing really admirably. We're quite pleased with this performance and we'll get a benefit from that and that 2015 expenses will be materially lower. And we think we get back on a nice track to our long-term guidance of 60% margins in 2018.

Our service revenue, we grew our service revenue by 6% year-over-year between 2013 and 2014. We see that growth at 3% to 6% in 2015, but over 2014. M2M remains a solid foundation. We will enjoy double-digit growth in subscribers and revenues in M2M. We will be pressured however by a change in the usage profile of a NATO customer that will pressure us for about \$3 million on that line in 2015. We expect continued solid contributions on our OpenPort product, and we know we have \$10 million worth of growth coming out of our contract with the US government.

Our legacy handset business like our handset sales will feel pressure on subscriber gain this year, and so our guidance for 2015 contemplates the US dollar kind of working against us in terms of our subscriber gain, so that's our guidance in terms of service revenue.

Our EBITDA outlook is between \$230 million and \$240 million, which represents about 9% growth over 2014 at the midpoint of the range. So that guidance contemplates mid-digit growth in service revenues. It contemplates no growth in our equipment revenues, and it contemplates material reduction in our OpenPort expenses, all-in again 9% growth at the midpoint of the guidance range.

And so Matt did talk about the change in the financial profile of Iridium in 2018 with Nexus is completed. So if you consider we'll spend something around \$700 million this year on our Iridium NEXT capital program, and that falls in 2018 to around \$30 million, and we think it stays that way for around a decade. And so what you see is a firm that goes from a material consumer cash to one that is throwing off material free cash flow to the equity, and that's a change in kind of the lens that you look at the valuation of such a firm.

And so what are the sort of implications of this \$3 billion investment that we made on how we think about our prospects for growth in 2018 and beyond?

And so fundamentally, the \$3 billion expenditure is to replace our existing network. As Scott said, it was launched a long time ago and needs to be replaced. That's kind of the most fundamental reason for the expenditure.

But importantly from a strategic perspective, the new network, Iridium NEXT, kind of replicates the functionality of our existing network, low earth orbit mesh that has served to be the source of significant competitive advantage that has caused us to grow to this point. And so Iridium NEXT not only replicates but augments that functionality that's the source of our competitive advantage. That's one dimension of where you see it impacting our revenues into 2018 and beyond.

But just as importantly as that, it opens up new functionality that wasn't on our existing satellite constellation that enables us to avail of ourselves of significant new revenue sources. And so let's just take a look at some of the underpinnings of our growth.

The first, the easiest to kind of point to is the \$22 million in growth that's in-hand from a US government customer in 2018 versus what we saw in 2014. And that is a dividend from the functionality or network low earth orbit mesh that the US government is highly desirous of. That's how we were able to get that contract in the face of [truth withdrawals].

Aireon is a brand new revenue source that could not have been done on our existing constellation. It was engineered into NEXT. NEXT was purpose-built for Aireon as it was for Harris. You put those two contracts together and that's \$40 million in incremental service revenue in 2018 that doesn't exist today.

New products, commercial push-to-talk and Iridium GO!, again the only way you can do that is with a low earth orbit mesh network.

In M2M, similarly, we have built that business and we're taking away heavy equipment manufacturers seemingly week by week because of the superior functionality of our network and customers at large are seeing that, and NEXT will continue that source of competitive advantage.

And finally, in maritime and broadband, Iridium Certus. I think of Iridium Certus just like I think of Aireon. It's a brand new field that we can plow given the functionality of NEXT that we didn't have currently -- faster data speed to make us a legitimate player in broadband. And lucky for us, that's going to be the fastest growing segment of the market.

And you see mobile satellite services is expected to grow from \$2 billion in 2015 to over \$5 billion, and broadband is a big piece of that. That was a chart that Bryan showed that showed the L-band growing to nearly a \$2 billion market, and this investment that we made in Iridium NEXT sets the table for us to be a dominant force in that area.

And unlike we did with Iridium OpenPort in pilot where we essentially manufactured that gear ourselves, we, this time, said, "Hey, wait, this is too big of an opportunity for us. Let's go out and get the class players in the industry and have them build a product and bring all of their product expertise in the unique verticals that we're going to go after -- aviation, maritime, land. And so we were delighted with the outcome of that RFP that was concluded most recently.

And so let's just take a look at our short and long-term guidance in a fair amount of detail here and track back to the kind of the drivers of that growth.

So in 2015, we're guiding 3% to 6%. Let's step through. We know that we have \$10 million in-hand from the US government. We expected our legacy telephony business will not be a source of growth in 2015 given the strength of the dollar.

Iridium OpenPort will have a solid contribution. M2M will have a solid contribution notwithstanding the headwind I talked about. And we'll begin to see in 2015 the beneficial effects of our new products, commercial push-to-talk and GO! And so that we'll get to the 3% to 6%.

How do we get to sort of \$420 million to \$485 which represents 8% and 12% growth, respectively, over the \$309 million we did in 2014? Let's take the easy ones first, right?

So the government, we know the government, we have a contract for \$22 million more than we did in 2014. Between Harris and Aireon, that's an incremental \$40 million. So right there, you have \$62 million of the \$110 million you're looking for at the low end of the guidance.

[CAT1] run rate growth in SPD for four years and you're almost at the low end of the guidance. You don't have to believe growth in legacy telephony to get to the low end of the guidance. However, we think legacy telephony will return to low single-digit growth, which was how we characterize that business for some time.

We are the class player in the league. We don't think the dollar stays a decade's long high versus other currencies, you look after 2018. And we've demonstrated that we have pricing power in that legacy telephony business. So we think that, in fact, does return to low single-digit growth. As I say, you don't have to believe that to get to the low end of our guidance.

We think Iridium OpenPort continues to thrive as does M2M. Bryan and Matt talked extensively about GMDSS. That's essentially a calling card on 60,000 vessels that we cannot just market that service to, but more importantly be market Certus within maritime in a big way.

New products, Iridium GO! and push-to-talk. In 2018, when that then have four years of history under their belt, and I would encourage you to check out for those products in our booth because we're very proud of them.

Iridium Certus, we think that we have eyes on something like \$100 million opportunity in 2020 in that area and are invigorated by the fact that the partners that we brought in actually throw around more optimistic numbers than we thought. So we think that's a really major opportunity a la Aireon that NEXT is going to afford us the opportunity there to execute against. That's what gets us to the \$420 million to \$485 guidance that we've issued.

Let's talk about Aireon because it's such an important and unique element of our story.

So Iridium has executed three contracts with Aireon. The first is for hosting fee. So Aireon owes Iridium \$200 million. That's an interest-bearing receivable from Aireon by Iridium that is importantly senior to some \$280 million with equity capital in that venture. So the equity doesn't see a dime until Iridium gets \$200 million out. And as I said, the interest-bearing receivable, the way that will come into our book is we'll get the \$200 million in 2016, 2017, and it comes into revenue as \$14 million a year over the life of NEXT. So that's the first element.

The second element is data fees. Aireon is committed to pay Iridium roughly \$20 million a year, and we expect sort of a useful life notionally at 15 years. That's a \$300 million contract from between Aireon and Iridium.

And finally, when we stood up Aireon, NAV Canada always was desired to being the control equity in that venture. And when we attracted \$120 million from the other ANSPs, they ensured that the payload got built. The math didn't work. And so at that time, Iridium agreed to sell back certainly of its interest back to Aireon to cause NAV Canada to be able to be at 51% and for Iridium to retain 24.5% and the other ANSPs to have 24.5%. For that sale, Iridium is due \$120 million.

So you tally up that, that's \$600 million worth of contractual value that is due to Iridium from Aireon and \$34 million in revenues in 2018. And that's up before we talk about the 25% retained interest in what my colleagues have described as I'm sure you're thinking what could be a very, very valuable enterprise that is kind of generational in kind of legacy. We consider it as replacing technology of the dates of the Second World War.

A couple of minutes on our capital structure and CapEx snapshot. The yellow bars are current thinking of how your spending gets done. You see a significant spending of 2015 and 2016 as we're getting into the final touches of this program. We've drawn about \$1.3 billion under the COFACE facility, and we expected that to be fully drawn in the first quarter of early 2016. And so we see peak net leverage of between 6 and 6.5 times in 2016 and delivering down to approximately four times in 2018.

And so let's wrap it all up. What is this enterprise look like in 2018, this picture that's kind of central to the investment consideration?

So it has service revenues between \$420 million and \$485 million. Aireon will have had significant value, realized and Iridium retain a significant equity interest in a very valuable enterprise. EBITDA at approximately 60%, and the Company is not done then consider mature satellite companies have EBITDA margins in the 70%, 80% range. That's just scale. So the more our service revenue grows and we've outlined the prospects for continued growth in 2018 and beyond, the EBITDA margins will enjoy the same operating leverage that we've enjoyed for the past decade.

Cash taxes, we expect to be negligible. CapEx, with the NEXT program behind us, you know, you get to enjoy the benefit of that expenditure and they average \$30 million for approximately 10 years. And so the free cash flow to equity we put all together is materially positive in 2018. And so given that picture, that's a dramatic change to the equity free cash flow that can help but support long-term value creation. And you consider an enterprise that has these characteristics has the potential for numerous strategic and financial options, and they can't help but benefit the equity.

Thanks. And I guess, we're going to have a Q&A.

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## QUESTIONS AND ANSWERS

**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Okay.

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**Tom Fitzpatrick** - *Iridium Communications Incorporated - CFO*

Thanks.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Seems to be our final Q&A panel. We'll break after this for lunch in the facility store.

Do we have first the question?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Or any other area we've already covered if you like, we'll pass that back if you didn't get questions answered in the other sections, too.

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**Unidentified Company Representative**

Just like the last, Matt?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Yes.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

First question, Chris?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Why am I still good looking? I keep waiting for that question. I never get it, I don't know why.

Hey, Chris.

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**Chris Quilty** - *Raymond James - Analyst*

So a question on the momentum you're starting to see on the government side, all very encouraging customers are using the network, but how and when did they generate incremental revenues to you or Kenneth outside the context of recurring contract as it stands?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Yes, Scott know that because we look at him all the time and reminded what that date is. So he has that emblazoned and he can -- but probably not this year as much. Some of this is early stages that's going very well. But 2016, 2017 are definitely a timeframe when we see a lot of these opportunities starting to pay off. There are some really significant numbers and some of these programs that we're working out in terms of numbers of devices, and there's an awful lot of interesting things underway.

But things like this that tell us time and location, I didn't talk a lot about that, but that really has significant bottom line implications to us as that starts taking off because that almost creates a whole ecosystem of revenues on behalf of [CETel] and their partners, which we end up getting some nice service revenues to support as they turn on regions. All these things started hitting more the 2016, 2017 and 2018 time frame.

And really I was excited in our recent partner conference about just all the activity around broadband because OpenPort was interesting to them, but never decided to move forward. But when we start talking about the partners and speeds that we deliver with NEXT, that really was a very



active conversation and discussion. And literally, they're starting to become active planning now about implementing that out of the gateway of what that could drive to be quite significant, too. And again that's more 2017, 2018 type revenues, but that again adds on to the base that we have.

Thanks, Chris.

Others? Over here.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Andrew?

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**Andrew Degasperi** - *Macquarie Capital - Analyst*

I have a high-level question I've wanted to ask. With a lot of the satellite companies, we're always sort of trying to figure out how much capacity it have and how much at least subscribers that you can support and things like that. And your government contract was interesting because it's unlimited so you just clearly had no concerns about capacity on block 1.

But when we're thinking about really modeling you into the 2020's and beyond, at what point does capacity become an issue. How many subscribers can you support on this network? And is there anything you can do in terms of launching additional satellites into the planes to add capacity? Just so how do I think about that?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Yes, great question, complicated answer and almost impossible to answer easily. I mean, I wish I could just say it's X -- some unit. We're at Y percentage of that.

We are at a fraction of what our potential is and a lot of that is not because we have a certain spectrum, but it's the reuse factor that we're able to use it over and over again, and the efficiency in which we're using that today goes up because of the improvements that Scott's team is making in the network today, so we're using even today the network a lot more efficiently.

For example, a new system that just got put into place just last year, the latest revision of our machine-to-machine software really dramatically increases the reuse factor of how M2M works in dense environments. So we kind of created capacity for ourselves just by really using that much more effectively.

Certus broadband, for example, uses the spectrum much more efficiently than we're using it today, so the waveforms are far more effective in terms of being able to deliver say a couple of 100 kilobits per second up to a megabit. We were trying to do that with OpenPort or with LBTs. It would just be very, very -- they'd be at least 3X times. So we're making more. It's not just the spectrum we have, but we're really, really using the spectrum much more efficiently.

That was said, I have a business plan and we've ever been in the Company with 25-year business plans. But when you're in a satellite business, you have to do that. And I think we are fine up to 2030 to the life of say you easily expect to see. And the revenues that we're generating are far and advanced to the ones that Tom was talking about in 2018, 2020. So it's going to be a very big entity, fixed cost business, very high operationally, but before we have to worry about that.

That was said, believe me with those kinds of cash flows that will be seen in the 2020s, we have all kinds of options of what we could possibly be thinking about doing to add more capacity to launch other things to have other businesses, that sort of thing to be thinking ahead and planning for the future. And it won't be long before we're thinking about those kind of thoughts. Good question.



**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Greg?

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**Greg Burns** - *Sidoti & Company - Analyst*

Just a question about the payback schedule and the debt. When does the first payment in 2018? And what is the peak principal and interest that you owe?

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**Alan Khalili** - *Iridium Communications - CFO, Aireon LLC*

So it amortizes, I think -- oh jeez, it has been a long time since I've had this question, Greg. It amortizes in 2018. The first two payments are lower and it's finished in 2024. And interest is right around 100, so just divide it that way.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Chris?

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**Chris Quilty** - *Raymond James - Analyst*

I think Bryan mentioned that you were bringing online the gateway in Russia this year. Is that still on track? And any issues in either deploying or bringing in partners or growing that business beyond the currency issues?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Yes. No, it is on track this year closer to the end of the year. A lot of systems are being procured right now. We have the facilities and yes that Scott mentioned the infrastructure sort of in place. I was looking at floor plans. And when I was over the office yesterday about where things are going and how the office will be set-up, I mean, there's always logistical issues and stuff in terms of we could expect this year, but I expect that to be done by the end of this year.

That's not revenue generated per se, it's more a license requirement that we've committed to the Russian government to do and a long standing commitment that we'll fulfill.

Yes, political instability isn't everything where Russia concern us in some ways, but because of how we're doing this in Russia, we are Russian in Russia. Iridium Communications is an entity in Russia with Russians. They actually create relationship with the government right now. They're pleased to see what we're doing. Our business is growing. We started with voice. We added GO!

OpenPort is starting to grow this year machine-to-machine is diversifying this year. You know, we're raising prices, but they're still a really, really high demand so the business is still quite robust in Russia despite all that.

Tom mentioned some of the headwinds in terms of some prepaid service we saw last year and how it's kind of valued this year, but that we're going to try to keep up with that increases. So overall, it's a robust business in Russia that is supported by our -- fulfilling the commitments that we made to gateways and being even more Russian, as you will, in Russia. And I think that's going to bode well for our long-term position in that country.

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**Unidentified Audience Member**

Hi, Tom. You gave out 2015 guidance, I'm thinking 2016, now I know you don't give guidance at all, but I'm thinking ...

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**Tom Fitzpatrick** - *Iridium Communications Incorporated - CFO*

2015 and 2018.

(Crosstalk)

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

2016.

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**Unidentified Audience Member**

Just thinking of the headwinds that you're having right now, assuming the FX doesn't get any worse. You obviously have the Aireon payments coming in. I mean, technically you're speaking we should be seeing a service revenue spike or at least on the top line.

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**Tom Fitzpatrick** - *Iridium Communications Incorporated - CFO*

So we...

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**Unidentified Audience Member**

We should be seeing service revenues sort of grow a lot faster than in 2015. And then secondly, I just had a question on the free cash flow side after 2018 once the businesses move along. Do you think you might be exploring capital returns or M&A at that point?

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**Tom Fitzpatrick** - *Iridium Communications Incorporated - CFO*

So the 2016 service revenue, we're not going to guide on 2016, but let's just consider what we're out there with.

In 2015, there is two headwinds. There is the ruble devaluation, which you have to believe that the ruble is going to devalue by another 48% in 2016 versus 2015 to experience that headwind again because that feels like that's non-recurring. Affecting 2015, it should not affect 2016. And similarly the \$3 million in the decrease in the NATO customer is a headwind on SPD that we don't see that recurring. So those two, both just in isolation should provide a benefit sequentially from 2015 into 2016. And we know that the government growth in 2016 is greater than 2015.

And we know that commercial push-to-talk and GO! have both 12 months in 2016 but that they did -- you know, we had less than in 2015, so all of those are positive and as we think about the profile of 2016 revenue growth versus 2015.

And the other question was...

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

What happens in 2018? What were...

**Tom Fitzpatrick** - *Iridium Communications Incorporated - CFO*

So I would just offer that your financial types, there's an amortization schedule that ends in 2024 that there's two principal payments in each year. And the firm is going to be at four times leverage in 2018 with a disability to a decade of significant free cash flow because the CapEx program is behind it. We'll have to consider it inappropriate to allow such a firm to de-lever, just go down the two times leverage. That doesn't seem like that's in the card.

We think that there's going to be, as I said on my chart, numerous financial and strategic alternatives that are presented to the Company or the Company they consider with that kind of a profile at that point in time.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

We got time for two more.

Tim?

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**Unidentified Company Representative**

Okay.

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**Unidentified Participant**

Over here ...

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**Marty Pine** - *Canada Pension Plan Investment Board - Analyst*

Hi, [Marty Pines] from Canada Pension Plan Investment Board. Two questions. The first one, when you look across the revenue stream, you sort of provided the service revenue growth profile for some of that, but where do you see the most pricing power on a completely like-for-like basis, your ability to put their price with your customers. That's the first question.

And the second one is more holistically on FX. How can we think about your ultimate end-users? I know your wholesale platform who are generating their cash flows and FX and forego a flat US dollar pricing might be a pretty material cost step-up, just maybe a more broad discussion on FX would be helpful. Thanks.

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**Unidentified Company Representative**

Right.

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**Alan Khalili** - *Iridium Communications - CFO, Aireon LLC*

Yes. So what we feel -- and we don't sell to the end-user. We sell, in US dollars, handsets. The only place we sell in non-US dollar in Russia and we sell in ruble there, okay? And so handsets are sold in dollars globally.

We feel like what happened to us on FX tied to Russia was really a one-off deal. If you consider that the ruble traded between 25 and 35 to one against the dollar for a decade, it was at 39 to one in November. It ran to 70 to one in December. Russia is a small business for us, \$5 million, \$6

million business, but our revenues that we sold in 2013 or excuse me in 2014, we now are going to come in at \$50 on the dollar because we had sold them in dollars, right?

And so that's why FX added to us was kind of prominent this year. That was, like I said, a one-off deal. But if you look back in time as to our handset sales, which is really what is most susceptible to a strong dollar, it's the marginal purchaser. So the strength in the US dollar is not going to affect the first responder, others that are highly inelastic. It's going to affect the marginal purchaser. And so we've seen, at the dollar strength then it's correlated to lower handset sales, but not materially so.

What you have is the dollar at an 11-year high versus the euro. It's similarly trading against the Aussie dollar and the Canadian dollar, and the ruble is just -- so we think you are talking about FX as impacting our results this year because it's kind of extraordinary in what's happened in terms of the strength of the dollar in a very short period of time. It's atypical in the last decade.

So, I mean, when we talk about pricing power, right? So we think about our handset business as being highly inelastic. And we think that way because what we know is that a competitor came into the market six years ago or five or six years ago and did a lot of talking about how they were going to take material inroads against us with their product that its attribute was sold for \$0.50 on the dollar. And what we've seen on our result is that initiative has not affected us.

So the learning from that is we feel as though we have pricing power in our legacy handset business, right? We were able to put a price increase on that phone, I guess, two years ago to very little effect. And so that's the kind of a finite market and that question has been asked and answered.

In M2M, right, and in GO! and in other areas, we want to be relevant. And so we'll take the price of a modem down in price to get the annuity business for it could be years and years. And so we don't feel like though we have pricing power, but we'll leave the margin on the table, particularly in the equipment line to get the annuity business, and that's how we think about -- I mean, I think price in general.

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

To add that from a pricing power here, but I mean, we really try to do important things for important customers that can't be done many other ways. That's sort of a mantra within what we're about.

So, we don't really want to be in a commodity business. We don't want to go after the lowest price on broadband business and compete head-to-head with the 18 other people who might be trying to provide that on specific areas. So where we do best if you want to call it there is where we provide very unique advantages where, as mentioned, machine to machine is a good example. Those customers who want uncompromising latency in coverage, they're going to pay for that.

Now, technically we're really not charging much more per byte, if you will, than somebody else, but we get used four, five more times than the other guys do. So our ARPU's are a lot higher as a result of that, and that's the kind of business we really like to do it.

We've actually raised prices in some places in the handset business, on postpaid. For the most part, that hasn't been a -- even though others have come in and dropped and provided really low-cost products. But it when end consumers or enterprises are searching for a satellite solution, you don't have the luxury of having tried them all out and having all your friends try them all out. You go buy some of the selections there by these guys must be the best. They're pricing twice as high. And it's true actually in the case that we are, but that's why I think these low-cost, try to get volume hasn't really worked because that isn't really how people are selecting service. But I really like some of these new things we're looking at doing with the DOD, [Cetellis] and other things that are absolutely unique. Burst as unique.

And by the way, Certus, I just want to remind again, we're not just trying to compete for that broadband at a bit per \$1 rate. We are creating a multi-service product that brings in all the capabilities of Iridium, whether it be push-to-talk and Burst, and time and location technologies, voice, data, and bringing that to market, GMDS, FANS. That's going to really give us an advantage and make us the perfect partner to the guys who are going to compete in a commodity basis but really don't provide the coverage and capability.



Thanks, Marty.

Tim, did you have one back there?

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

,Got to make Tim the last one. Matt and Tom, your closing remarks.

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**Unidentified Audience Member**

Thanks. I just wanted to touch on competition a little bit. There's been a lot of talk about Inmarsat competition and a little bit about Orbcomm. I haven't really heard anything about other players. I mean, are there any concerns or today just not impact your future planning? Particularly, do you have any concerns about people doing irrational things in the future just more wider competition?

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

I always have concern about people doing irrational things in the future. But I assume you're kind of talking about some of these ideas that people are exploring about launching hundreds or thousands of microsattellites that will blanket the planet for billions of dollars and provide service to the \$3 billion or the other, whatever.

Good luck to them, I say welcome if you can get the money and ability to do that. We've had 18 years. Actually if you go back to our predecessors, 25 years of understanding this business pretty well. In some ways, we were the crazy ones in 2010 or even as we are the last analyst conference with these 81 satellites we are buying, now we look incredibly rationale and sane that, in fact, we look like slackers. I think we have only 81 satellites if you believe any of these business plans.

But to us it's about to have a programmatic business that closes, that delivers value overall. We haven't heard that yet from any of them. We haven't heard much about what their business cases are, whether others will join them in their charitable pursuits of providing that service to those places of the world that don't have it. That doesn't seem to close to me. So we don't spend a lot of time.

I'm looking forward to hearing more about their plans. Maybe they'll even be partners to us in the future because, frankly, we think that way in terms of what do we do best and what do they best. But again it's why it's Iridium Certus. It's the idea that you're going to put that in the cockpit of an airplane anytime soon is unlikely or that's going to save people in the oceans or whatever it might be. Very, very different business plans.

And beyond that really, yes, we don't compete with anyone like head on. There's not anybody else like Iridium and that's what we like to do, and that's why we want to exploit what's unique about us versus anyone else. And while there are some things that others do and edges collectively, we believe, we compete very, very well and we think that's a model that will hold up very well in long-term and create a lot of growth for us long-term.

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**Unidentified Audience Member**

And Globalstar and Thuraya, I mean, they just haven't really --

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

Frankly, Globalstar -- and you can see in the results that they're primarily North American oriented even in terms of sort of where their revenues come from. So I'm sure at the low ends as they're providing very low cost phones for certain segments that probably might not have bought our service anyway. They are competing or maybe they're going to expand in the market.



But you can see our two-way services say through a DeLorme are competing very, very well against [BOT], and I just don't see much competition from a go, for example, against their products. I really think they're really moved into becoming a spectrum play for the most part. While they talk about a future consumer-type business, we just don't see any relevance to it.

And Thuraya, there is regional places where they make sense especially on a handheld basis. Neat little product that they had as a sleeve. We didn't really think that was the right way to deliver smart phone capability, but I'm sure some customers are finding that valuable. They're very much of a regional broadband player so they're not really global fleets and global aircraft. So it's really, really on the edge of in terms of how we compete.

And it will be interesting to see what they do. They got to start coming up with another idea and their CEO, I'm sure, will be on your panel next week, and maybe we'll hear from them more about what they're going to do. But they kind of said everything is on the table, which I can understand why they have to say that in some ways, but also it's a little unsettling to their market to say what. Are they going to have backward compatibility? Are they going to be able to support these services long-term? And that isn't conducive to an M2M business, for example, or a long-term business. They just don't have that long-term vision yet.

So, there is competition, but we just don't sort of see it on a day-to-day basis. We're feeling like it's affecting our plans very much.

A good question. Do you have any final ...

(Crosstalk)

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

...and hallelujahs. I...

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**Unidentified Company Representative**

Hallelujah.

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**Matt Desch** - *Iridium Communications, Inc. - Chief Executive Officer*

So I make the final -- first of all, thank you all for coming. A lot of you know us well. And I know some of this is repetitive to some of you, but I think this is a first chance for us to really put this all out there and put it in context. And perhaps you learned something new about us today that you didn't know about.

What you are going to see is real satellites and our gateway infrastructure that we've been working on, and we're excited to show that to you.

Glad to talk to those of you who at least hear a bit more in the breaks and through that activity.

Those who are on the webcast and listened in, I hope that was helpful to you as well. And maybe we won't wait too long for the next analyst day since 2010, but thank you all for joining us.

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**Steve Kunszabo** - *Iridium Communications, Inc. - Exec. Director Investor Relation*

Thanks everyone. Lunch on the patio, and we'll be leaving from there for the facility store.



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