



● ● John Ratigan, President of iDirect Government

iDirect Government was formed in 2007 primarily as a product organisation. The company produces a broad range of line cards, satellite routers, network management software and hubs, and deals exclusively with the US Government and its civilian agencies.

It's been a big year for iDirect Government; the company has brought out its first new products in many years, all complete with state-of-the-art technology, to replace its nine-year old predecessor products. Addressing the growing complexity of deploying and managing global IP networks, iDirect Government's new equipment is expected to provide the most bandwidth-efficient, scalable and secure capabilities, making all the difference for government and military operations at home and abroad.

iDirect Government has previously found maintaining growth a big challenge due to its older products, and is now looking forward to several years of strong growth with its new lines and diversification into new market areas.

GMC Q&A

Growing portfolio of products ● ●

iDirect Government was formed under VT iDirect in 2007 to provide satellite products exclusively to the US Government. Hubs, satellite routers, line cards and network management software are amongst its product offerings, and the company's portfolio is growing at an impressive pace. Amy Saunders met with John Ratigan, President of iDirect Government, to find out more about the company's recent developments, its assessment of the market and its outlook for the future.

GMC: Can you provide an outline of iDirect Government's development over the years?

John Ratigan: The genesis of iDirect Government really started all the way back in 2003. We were a start-up organisation, and I came on board in 2003 to start the Government group. We were fortuitous in one way that the war was also starting at that time. We were able to make some pretty big headway into the military, to get some equipment and networks in place. We experienced some really rapid growth at that point, in both the commercial group and the military government group. In 2007, we were incorporated as a separate Delaware-based corporation, and then in 2011, we became a proxy organisation with our own directors.

GMC: What services and solutions does iDirect Government provide?

John Ratigan: iDirect Government is predominantly a product organisation. We don't really deal with services and support. Our organisation deals predominantly with the US military and all its civilian agencies. Meanwhile, our parent company is active in Europe, the Middle East, Africa and Australia, and they deal with those other militaries.

When we spoke last year, I told you how we were on the cusp of bringing out some new products, and since then, a lot has happened. We've developed many new products, and all of them have been released now. We have a whole new fleet of satellite modems and a new hub. All the products that we previously made have been refreshed. We brought out the first Evolution 8000 series in around 2009, and it's taken us longer than we'd like to get to this point, but the things that we're bringing out now are revolutionary in technology. Eight or nine years makes a tremendous difference in technology.

GMC: In March 2017, iDirect Government launched many of its new products to market. What can you tell us about those products?

John Ratigan: One of the new products that we make is a man-portable modem, the 950mp Integrated Router Board, which gets outfitted to terminals. The size, weight and power (SWaP) aspects are very important because military personnel have to carry this gear all over the world. We were able to take this newer product



● ● Photo courtesy of iDirect Government

and almost cut the weight in half. It didn't weigh a lot in the first place, but anytime you take some weight off, it's good. So, we cut the weight in half, cut the power requirements in half, and the size is around 60 percent of the previous version. We've also more than doubled the capability that it has.

There's another version of that product, the 9350 Satellite Router, which fits into a rack. It has all of the phenomenal performance metrics that we're bringing to market, but comes equipped with two demodulators, so customers can run a normal iDirect network with it as well as having a one-way receive-only system.

This additional one-way data transmission system is popular with militaries around the world and is predominantly used for video. We worked directly with the US Government to enable this addition to our latest products.

We also have three new airborne modems, all of which have dual demodulators. The big challenge with designing airborne modems is that aircraft move very fast, which, when coupled with the small HTS beams, means that the modem must be able to switch between beams very rapidly. We've also incorporated a lot of technology to enable these modems to operate at ultra-high speeds, when travelling at more than 1,000mph. While a commercial aircraft travels at around 500mph, certain military aircraft exceed 1,000mph, so the Doppler effect becomes a major challenge to overcome.

One of the things that military users told us would make their lives easier was a tactical hub, which can be rack-mounted into a truck. We responded by building a tactical hub, which is an enormously capable device that has two line cards in it instead of 20. We've had a really good response to it from our customers.

Our advancements are going to benefit everyone in the military. From the ground personnel who have to carry around the man-portable modems who will benefit from the smaller form factor and reduced weight, to the people who run the teleports, who will be able to use the advanced waveform capabilities to achieve higher data rates. We've also included the zeroized capability, which means that if a terminal looks like it's going to fail, it could be quickly negated.

GMC: When we spoke in 2016, you commented that, having reached maturity, maintaining growth was the biggest challenge faced by iDirect Government. How has growth developed since then, and what does the company have planned going forward?

John Ratigan: Maintaining growth is still our biggest challenge, and it's difficult for a couple of reasons. We were hampered for a long time when we were still selling the older equipment, and it's been difficult to do anything new. I've been very happy that we've moved past this vein of older products, and the team is excited about where we are now. We expect to have a really good three or four years out of the new equipment that we've brought to market.

The second reason maintaining growth is difficult is because we have such a large share of the market, so it's tougher to get further up that hill. The new products we've launched will enable new applications, though. We've been selling very small satellite modems for military aircraft for some time, and we've seen that grow steadily over the years.

GMC: Government spending is affected by a number of variables, including new leadership. How do you expect expenditure in communications capabilities to change in the years going forward?

John Ratigan: The market looks great for the future. There are some interesting times ahead for the US Government. We still operate on a sequester, which is where the Congress and the budgeting process restricts some of the spending in the military arena. It was designed to make the budget better so that there was a more equitable allocation of the funds. We're hoping that that goes away, and our new President wants to do that.

However, we haven't seen spending restricted by many of the customers which we have.

GMC: Recent innovations like HTS and flat panel antennas have been making major news in the last year. How have these affected iDirect Government's business?

John Ratigan: I believe that HTS is the biggest innovation we've seen since I've been in the industry. It's literally changing the way that we do our business. We've had to do a tremendous amount of work on our modems to fit the new HTS, particularly with the topography and the architecture system. All the communications and infrastructure software that runs the entire network, and the way that network operates and interoperates, is all part of the software. HTS has changed dramatically how we've had to do that, which is a good thing, because for people who use satellites, the biggest advantage of HTS is that you can get many more of these more powerful pipes. I think it's a great thing for us as it gives us more opportunities.

The innovations in antennas are another great step forward. The really restrictive thing with satellite communications is the antenna. It doesn't matter how small a modem you can build when you still need a big antenna, so we're seeing a lot of new phased array antennas coming out. The actual band in which they operate doesn't matter to us, since we can operate in any band. We design to a L-based frequency, and then we can up-convert to any frequency, including Q- and V-bands. From an engineering standpoint, what it does do is require us to optimise for the different bands.

GMC: What's on the horizon for iDirect Government for the rest of 2017 and beyond?

John Ratigan: We're continuing to expand the scope in which we can play. We're not going to wait another eight or nine years before we develop newer products. We'll continue to look at additional ways to garner additional market share, as well as new parts of the market. Between those two arenas, between the new products and the other things that we're looking at such as building specialised products for UAVs and the potential acquisition of new technologies, we think we'll continue to grow steadily.

When it comes to technology acquisition, what we'd like to look at is things that are complementary to our business. When I attend a trade show, I'll walk around and look at technologies that might fit well either into our electronics applications, or into where our product interfaces. We don't want to move into too many areas as it makes competition issues. For example, I don't want to make a satellite modem terminal because that would be competing with my own customers. But there may be other things that we could look at that would be complementary to what we do. Right now, though, there's nothing specific that we're looking at doing.

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