COMMERCIAL'S GROWING PROFILE
In the New MilsatCom Landscape

By Anne Wainscott-Sargent

Faced with tighter fiscal budgets and the unrelenting need for military bandwidth, DoD and government users are looking for ways to leverage the innovation and cost efficiencies offered by a more nimble commercial satellite industry.

Examples of a more inclusive, collaborative spirit are everywhere — from the National Space Policy and National Strategic Space Plan, which call for more hosted payloads and greater commercial engagement, to new procurement vehicles such as the Future Commercial Satellite Communications (COMSATCOM) Services Acquisition (FCSA), which replaces DSTS-G, to enable greater competition from the commercial market for a host of satellite services. Also, DISA's Assured SATCOM Services In Single Theater (ASSIST) initiative, if approved by Congress, would allow the government to move all its Ku-band bandwidth to a single spacecraft built by the commercial industry.

"There is growing confidence level in the interaction between DoD and commercial companies," says Patricia Cooper, president of the Satellite Industry Association (SIA). She says during the last decade, closer ties to the commercial sector have built a level of operational trust that wasn't present 10 years ago.

STRONGER COLLABORATION

Bruce Bennett, program executive officer for Communications for the Defense Information Systems Agency (DISA), observes that there is a growing recognition on both sides that "neither of us is going to succeed without the other."

"We're working on different kinds of concepts that bring more commercial (capabilities forward) to satisfy the DoD's needs. We're actively participating in their roadmaps; they're actively participating in ours," says Bennett.

The commercial industry, he adds, has a seat at the table for Operationally Responsive Space, to facilitate better tracking of all of the objects in space and to reduce the risk of interference or collisions as space gets more congested.

Cooper notes there is more industry-government classified dialogue occurring through forums such as the Mission Assurance Working Group. This group brings DoD and the commercial satcom industry together to discuss ways to improve processes, programs and policies for enhanced mission assurance. According to Cooper, the group's working-level discussions led to the formation of the Space Data Association last year.

"The (reliance on commercial providers) is becoming more institutionalized," adds Bill Ostrove, a research analyst with Forecast International. The change, he says, is driven by a combination of several factors — including sheer demand for connectivity, economic pressures and the cancellation of TSAT. "The economy and the renewed focus on saving money by government has sped the process along and made it more important."

It's a different environment compared with 10 years ago when senior Pentagon officials were on record saying commercial bandwidth was a temporary gap filler for the military. That position, says Cooper, was not a "huge confidence builder in the commercial sector for investment or innovation to respond to military requirements."

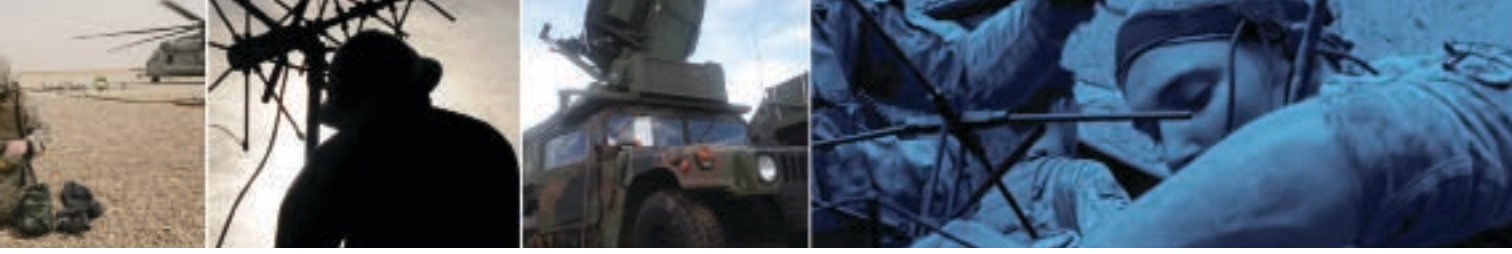
"The landscape has changed dramatically to the point that the government, in particular the DoD, treats service providers as mission partners," observes Tom Eaton, president of Harris CapRock Communications.

Eaton sees more opportunities to provide the military with fully managed services, including offering a secure portal that users can access to send their requirements and communications needs directly to Harris CapRock.

KA-BAND PAYLOADS

Inmarsat, a longstanding L-band supplier to the government, will launch its Global Express Ka-band satellite network in 2013, specifically to target government users. It's no accident that Inmarsat is betting on Ka-band as the next big satellite capacity play, as WGS comes online and the DoD begins to shift much of its future UAVs and tactical communications to Ka-band — a more available spectrum that can support higher bandwidth-intensive ISR applications. Boeing is building both WGS and Global Express spacecraft.

"We are really positioning this to be in the sweet spot of where the government is headed and most importantly, making the investment ourselves to get there,"



says Peter Hadinger, president of Inmarsat Government Services. He points out that while other systems depend on government funding or commitments, "Inmarsat has made an assessment of the market and has decided to make its own commitment to the tune of $1.2 billion to meet this demand."

Even regional players like Yahsat, the UAE's new satellite provider, are targeting the U.S. DoD and allied partners for Yahsat's Ka-band government payload, launched in April and used currently by the UAE Armed Forces. Yahsat officials now hope to commercialize the payload with other branches of the UAE Armed Forces as well as allied governments.

According to Rashed Al Ghafri, general manager of YahService, U.S. and European military customers are showing positive interest in his company's secure payload, which offers regional, global and spot-beam coverage. The latter allows users added flexibility to steer their beam anywhere they wish within Yahsat's global footprint.

DISA welcomes more bandwidth options, especially at a time when the U.S. defense community faces unprecedented pressures. President Obama has proposed new defense budget cuts of $400 billion in the next 12 years. At the same time, DoD must support an escalating number of military operations around the globe. According to DISA's 2011-2012 Campaign Plan, published in June, DISA supported an unprecedented six simultaneous operations during a four-month period in fiscal 2011.

FCSA

Some of the most obvious inclusive changes are in the area of procurement. DISA last year introduced FCSA — a three-part procurement vehicle that replaces expiring DISA and GSA contracts, including DSTS-G, Inmarsat and SATCOM II. The government has implemented the first two components of FCSA — for transponder capacity and for subscription services. DISA hopes to award the final component — end-to-end solutions, or customer-defined satellite service, equipment and engineering support — in August.

Bennett says, "Our goal with FCSA is to open the market to all potential vendors so we can get their latest ideas, their latest

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technologies and bring them to bear on our ever-changing DoD needs."

Industry players report that the transition to FCSA hasn't always been smooth, but no one argues that it has the potential to change the playing field and give the government better value for commercial capacity and satcom services.

Particularly for FCSA's managed services component, "It will be up to the industry to step-up, notes Brig. Gen. Tip Osterthaler (USAF Ret.), CEO, SES US Government Solutions. "The more active companies are in offering new and innovative services, the more options the government is going to have," he says.

DISA claims that four times as many commercial companies are on FCSA than were on DSTS-G and the number is growing. Commercial bandwidth costs still went up this year under FCSA, "but they went up less under FCSA than they would have with DSTS-G," says Bennett. Today, the DoD spends more than $200 million a year on commercially provided connectivity in just one theater, says Bennett. And, according to published figures, regularly relies on commercial sources for more than 85 percent of its broadband connectivity, and in some theaters, 95 percent.

Bennett hopes to significantly reduce the high-cost of leasing commercial bandwidth through programs like ASSIST, which would involve launching a commercial spacecraft and moving all its leased capacity to that asset. The program, which faces Congressional approval, would save an estimated $1.5 billion in 10 years over leasing bandwidth at $200 million a year.

"ASSIST is an example of where the government has engaged industry early and I think it's very helpful," says Osterthaler, who considers it an example of thinking outside the box.

The industry is closely watching Congressional debates regarding ASSIST and where shrinking defense dollars will go — to new programs like it or to existing programs like WGS and AEHF.

"It's very hard for government to make informed judgments on what they should fight for in this regard because there is no way to logically compare the actual cost of WGS spacecraft (when one includes all the non-recurring development expense, acquisition effort, operating costs, etc.), to the cost of equivalent commercial capabilities bought as a service," Osterthaler says. He would like to see "the cost to acquire the capability analyzed looking at various options such as lease versus buy, but on a level playing field using common cost accounting methods."

HOSTED PAYLOADS

Hosted payloads, say proponents, offer faster and affordable access to space. Forecast International estimates that during the next decade, 461 commercial communication satellites will be built. "We're projecting that the highest level production will be produced over the next two to three years," says Ostrove, adding that it's in the government's interest to "get on board as soon as possible" before capacity is taken by commercial firms.

DISA's Bennett isn't convinced yet that the industry has made the case for hosted payloads to the satisfaction of Congress, citing lack of flexibility as the biggest detraction since a hosted payload, once launched, would restrict the government to only using that service.

"The impetus for hosted payloads is clearly there," says Lt. Gen. John Campbell (USAF- Ret.), executive vice president of Government Programs for Iridium, citing both the National Space Policy emphasis and growing industry interest. "For some potential hosted payload partners, the need to nail down requirements early is a challenge. Others see it as a real opportunity to make sure that their payloads get

into space on time and on budget."

One thing is certain — the government and the commercial sectors must engage early and often if they hope to jointly meet the military's growing needs for bandwidth today and in the future.

"I think the commercial satellite industry has shown its mettle in serving military requirements," says Cooper. "There is much greater collaboration and cooperation on RF interference and detection. There is greater exploration of issues like hosted payloads and ASSIST — what are the new models we can look at? There is more interest in understanding how foreign assets could be leveraged for military requirements, which allows for a different kind of exploration of how to serve the mission, both from the content of what communications must provide and where it must provide it geographically. "

For others the pace of change isn't nearly fast enough. "I think we (the United States) miss opportunities to leverage the strengths of the commercial satellite industry by not thinking big enough, not anticipating how resourceful the resistors to change may be and not taking them on in a real way," says Osterthaler. "I am genuinely concerned that we will not have the space capabilities that we need to support our warfighters if we don't accelerate the pace of change." ■

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