

UPCOMING EVENTS

11-14 June 2013
Pacific Wideband SATCOM
and Teleport Working
Group
Hawaii

DISA does not formally endorse any non-DISA events. These events are provided for information purposes only.



CHIEF'S MESSAGE



Welcome to the spring edition of the Commercial Satellite Communications (COMSATCOM) Scoop!

In this issue of the Scoop, we recap some highlights from the annual DoD COMSATCOM Users' Workshop; explore the different types of partner nation agreements or licenses that may be required to operate your commercial satellite leased frequencies; provide an update on our latest efforts to ensure the customer's information is protected by requiring COMSATCOM contractors to use public key infrastructure (PKI) certifi-

cates; and, provide tips for avoiding unnecessary billing for mobile subscriber services (MSS).

As always, if you would like to see any particular topics in an upcoming issue of the Scoop, please let us know. E-mail your suggestions to

disa.meade.ns.mbx.comsatcom-scoop@mail.mil. We strive to deliver interesting and informative articles to you each quarter, and welcome any feedback.

We are also looking forward to your responses on our annual customer satisfaction survey. This survey provides essential feedback and allows us to ensure we continue to provide services that are cost-effective, customer-focused, and operationally responsive. The survey is currently active at the link to the left and is scheduled to be active through 31 May 2013. We thank you in advance for your participation. Lastly, I would like to mention that it has been a pleasure working with you. I leave this position this summer and it has been both rewarding and challenging. Thanks for all the great teamwork and may it continue!

— COL Michelle Nassar

ANNUAL CUSTOMER SATISFACTION SURVEY

<https://www.surveygizmo.com/s3/1170307/77d14b48691b>

2012 DOD COMMERCIAL SATCOM USERS' WORKSHOP

The Department of Defense (DoD) Commercial SATCOM Users' Workshop is an annual event co-sponsored by the Satellite Industry Association and U.S. Strategic Command (USSTRATCOM). The 2012 workshop was held in Arlington, Virginia; December 12-14, and brought together the DoD and the commercial satellite industry to discuss the theme: "Innovative Commercial SATCOM Technologies and Business Models in an Austere Budget Environment." The Defense Information Systems Agency (DISA) COMSATCOM Center presented six briefings to the group, they were: EMSS/DTCS Update; FY10 & FY11 Annual Report; Mobile Subscription Services (MSS) Transition; Customer Awareness; BGAN RAS Overview; and Future COMSATCOM Services Acquisition (FCSA) Update. The top five issues relative to the COMSATCOM community affecting the DoD are: 1) Services are highly encouraged

to discontinue all inactive Communication Service Authorizations (CSAs) not used in the last five years; 2) Blanket Purchase Agreements (BPAs) will reflect services' requirements and request for single vendor to manage airtime; 3) Transition of services from current contract to GSA Schedule 70 is highly customer dependent; 4) Fees for FY13 are: FY13 DISA COMSATCOM fee is 2.21% and FY13 DITCO fee is 2.00%; and, 5) FCSA leverages the government's buying power by consolidating DISA and General Services Administration (GSA) service offerings into one mechanism. Emerging industry activities include commercial satellite owner/operators preparing for seven new satellite launches over the next three years, industry explaining increased airborne communications on the move (COTM), new mission assurance and communications monitoring, and a new medium earth orbit (MEO) Ka-band constella-

tions. Emerging activities for DoD include working with U.S. Congress on exploring options for authorizing multi-year contracts for information technology services in order to leverage the cost benefits as seen in procuring of vehicles or munitions within DoD. This, along with all of the new potential commercial offerings, should result in increased choices, increased competition, and lower costs for the DoD. The workshop was a success in bringing government decision-makers together with commercial satellite operators, service providers, integrators, and manufacturers to foster discussions on future possibilities for DoD Commercial SATCOM. For more information on the 2012 conference, please visit <https://www.dodsatcom.com>. For more information on the Satellite Industry Association, please visit <http://http://www.sia.org>.



QUICK TIPS — Avoid Paying Twice for Mobile Services

Over the past year, the COMSATCOM Center has been facilitating the Mobile Satellite Services (MSS) transition from the legacy Inmarsat contracts to new service- or agency-specific Blanket Purchase Agreements (BPAs) being awarded through DISA's partnership with the General Services Administration. Through the transition process, the COMSATCOM Center has noticed a trend of old services continuing to be billed after new services are established. The COMSATCOM Center would like to remind MSS users that as new orders are approved and new SIM cards are received, users must then discontinue the old service or billing will occur for both the old and new services. For any questions or concerns, please contact the MSS help desk at 301-225-2600.

EMERGING TECHNOLOGIES CORNER: KU VS KA BANDWIDTH - User Perspective

While many have likened the comparison of Ku-band and Ka-band to the well-known Blu-ray versus HD DVD, or VHS versus Betamax format wars of the past, our situation is not a frequency band duel to the death, and we should not even assume the winner will be one or the other. In this situation, the winner will ultimately be the consumer. The recent emergence of commercial Ka-band as a serious challenger to commercial Ku-band is not due to a specific advantage one has over another. It is actually tied more closely to the fact that the consumer's requirements are changing and thus drawing attention to throughput limitations of existing satellite systems. For instance, typical existing Ku-band systems were designed with wider spot beams for widely dispersed VSAT net-

works that primarily focused on simplicity, video teleconferencing, and reliability. These lower Ku-band frequencies required smaller margins to overcome rain fade and thus wider spot beams provided regional service at lower costs. On the other hand, wider spot beams limit frequency reutilization. This, combined with limited throughput, made these Ku-band payloads less desirable to modern high throughput users with an increased focus on mobility. Due to these existing satellite systems, consumers have developed associations with suitability of frequency bands that are not truly characteristic of the frequency band, but rather the satellite business progression.

The new Ka-band systems such as Inmarsat-5 are coming onto the market and promise to deliver substantially greater throughput than current Ku-

band offerings. This fact has led some in the industry to conclude that Ka-band capacity is a superior evolution of Ku-band capacity. However, the reality is that there are high throughput Ku-band satellite systems also being developed that offer similar throughputs with smaller spot beams. With the investment in both bands, today's debate to determine whether Ku-band or Ka-band is better continues. One thing is certain – we will continue to experience more technological advances, and satellite manufacturers will continue to launch newer, faster, stronger, and more flexible satellites. Who knows what will be 'best' tomorrow. Next issue we will look at comparing MILSATCOM Ka and COMSATCOM Ka capabilities, expectations and hardware comparisons.

NEW INFORMATION ASSURANCE REQUIREMENTS Improve OPSEC

In February 2013, the COMSATCOM Center began requiring commercial satellite contractors to digitally sign and encrypt all post award contract related documents exchanged with the government using Medium Assurance External Certificate Authority (ECA) Public Key Infrastructure (PKI) certificates. These certificates are interoperable with DoD PKI certificates and provide the same level of security. Currently this action only applies to new contract awards; however, the Center is working to modify current contracts to include the requirement. In conjunction with the General Services Administration (GSA), DISA is also modifying the GSA Schedule 70 and Custom Solution (CS2 and CS2SB) contract vehicles so that pre-award documentation, such as contractor quote submissions, will be included in the requirement. These measures will bring COMSATCOM acquisitions into compliance with DoD regulations on the use of PKI while improving the operational security (OPSEC) protection provided to our customers and their services. Customers can be assured that this will not increase the cost of their services or associated fees, now or in the future. The COMSATCOM Center is committed to continually improving the security of provided services without impacting the cost and quality afforded to our customers. Questions on the implementation of the vendor PKI requirement can be addressed through your regular COMSATCOM Center point of contact.



HOST NATION AGREEMENTS AND LICENSING For Military Users of COMSATCOM

Host Nation Agreements and Licensing: Why are they needed?

When a mission partner is planning on using satellite bandwidth or equipment in foreign countries, it is required to follow the laws of the host nation when operating in the commercial spectrum. DoD or US policy does not supersede the laws of the host nation.

The term host nation agreement, or HNA, is often used as a blanket term to describe all of the different licenses that may be required of the terminal user, and sometimes the names of individual agreements are used interchangeably. There are five points of reference that DoD COMSATCOM users need to remember.

Policy. Memorandum MCEB-M-008-03 dated 18 August 2003 provides DoD spectrum procedural guidance for DoD users with requirements for commercial satellite services utilizing fixed earth terminals outside of the US and its possessions (OUS&P). Financial. Fees and financial charges for commercial satellite communications use, operation, licensing, and appropriate spectrum analysis that are required is the responsibility of the user or program manager. Equipment Certification. Commercial leased equipment cannot be certified through DoD Channels; therefore, the commercial provider must ensure any equipment certification required for use outside of OUS&P is accomplished. The user must ensure the requirement is for equipment certification to include host nation ap-

proval is included in the lease contract.

Host Nation Agreements (HNAs). US Government (USG) entities are obligated to secure HNAs and/or specific transmit licenses for their in-country earth stations prior to commencing operations. Failure to get HNA equates to no protection from interference, possible interception and potential violation of international and local laws. This includes fines of up to \$500,000; seizure of equipment, and creating an "International Incident." *A key point is that DISA will not release satellite capacity until HNA is in hand.* Users need to remember that an HNA does not automatically provide the right to transmit. Usually there is a requirement for typical licensing procedures. Often the issue is what entity can hold license; the third party vendor, the US Government, or local operator. Fees are associated with this action. A Host Country may exempt the US Government from regulatory fees, although not commonly done. Fees range from ~\$300/year to \$5,000/month.

A few examples are -- Iraq & Afghanistan: No HNA required for US & NATO military users; Germany: Frequency clearance/assignment from local regulator; Australia and New Zealand: No HNA required for Ku-band (14.0 GHz-14.5 GHz) VSATs.

Frequency Clearances. Most COMSATCOM users only require a frequency clearance (sometimes called a frequency license), but other international agreements include landing rights, and terminal license/certification. Frequency clearances are very important for the COMSATCOM Center mission partner.

They are required for operations in most foreign nations and must be included in the service contract and coordinated by the service provider. Service providers typically hire consulting firms who specialize in commercial spectrum HNAs and terminal licensing to secure licensing.

A frequency clearance is very specific and grants the user permission to operate a particular terminal, in a particular location, on a particular satellite, at a particular frequency. If any of these elements changes, the frequency clearance must be amended. Time to obtain frequency clearances can vary from days to months, depending on the host nation; therefore, it is critical to plan COMSATCOM requirements well in advance to ensure a frequency clearance can be in place prior to the required service start date. Frequency clearance is beneficial to the host nation as it allows management of the radio frequency spectrum. It is also beneficial to the user as it offers protection from radio frequency interference. Without a valid frequency clearance, the user is potentially in violation of international laws and is subject to fines of up to \$500,000 and seizure of equipment.

The COMSATCOM Center has knowledgeable experts to assist in defining your individual COMSATCOM needs. If that includes an international agreement, your COMSATCOM Center representative will work with you to gather all the details needed to obtain the right licenses for your satellite requirements. Please see next page for definitions of common host nation agreements and licenses.

HOST NATION AGREEMENTS AND LICENSING For Military Users of COMSATCOM Continue

Host Nation Agreement -- Permission for a foreign government to “use” the resources needed in a country, granted at sole discretion of host country.

Terminal Licenses/Certifications -- These are licenses or certifications for satellite terminals to operate in the host nation. Certification of DoD-owned terminals is accomplished through military channels using a DD Form 1494. Certification of leased terminals must be accomplished through the service contract provider; military channels cannot be used. Terminal licenses/certifications do not grant a right to transmit; a frequency clearance is still required. Satellite service providers may also have terminal certification requirements in addition to the host nation.

Landing Rights -- This is an agreement between the International Telecommunications Union (ITU), host nation, and satellite owner to land a space-based signal into their nation. This is coordinated when a satellite provider applies for an orbital slot. There is no fee or contracting requirement for landing rights; it is solely the responsibility of the satellite owner.

Frequency Clearance -- This is a license allowing a specific terminal in a specific location to transmit to a specific satellite on a specific frequency. There is a cost associated with obtaining frequency clearance and it is purchased through the same contract as the bandwidth. Cost and time to obtain frequency clearance varies between countries.



SATELLITE SUPPORT CENTERS — New Name Same Mission

The Global Satellite Support Center (GSSC) in Colorado Springs, CO and the Regional Satellite Support Center – CONUS (RSSC-CONUS) have been re-designated as RSSC-West and RSSC-East, respectively. At this time, the mission and personnel have not changed. Please continue using your servicing SSC as you normally would.