Would Reorganizing Space Management Help GPS? Three Experts Weigh In

Dee Ann Divis

The battle lines over restructuring the management of military space were drawn sharply Sept. 18 when the Senate passed its version of the National Defense Authorization Act for Fiscal Year 2018.

In the House version of the bill, which was sent to the Senate in July, lawmakers ordered the Air Force to create the Space Corps, a new organization that would report directly to the Secretary of Defense. The head of the Corps would be an equal of the Air Force chief of staff and would serve on the Joint Chiefs of Staff. Space Command would become a subordinate unified command under U.S. Strategic Command.

The Air Force is not enamored of the proposed changes and neither are Senate lawmakers. They amended the bill during floor debate to prohibit spending money on organizing a Space Corps. They also approved language that would instead create a new Chief Information Warfare Officer who would have responsibility for a host of areas including GPS, cybersecurity and spectrum.

Lawmakers want some sort of change so programs better hit their schedule and budgeting targets. They are trying to elevate military space programs so they have a better position in the budget process and would

INTERVIEW continued on page 4

Published by Inside GNSS

AFSPC Commander Holding Steady Through Sea of Changes

Interview with Gen. John Raymond

The ground was already shifting when Gen. John (Jay) Raymond took charge of Air Force Space Command (AFSPC) in October 2016. Just six months before, his predecessor Gen. John Hyten had announced the Space Enterprise Vision, a new way of approaching space asset development, management and protection now that space had become both contested and far more crowded. There were issues across the space, ground and user segments of the GPS program; sequestration was still looming and Congress was looking closely at how to reorganize the way the Air Force managed its space programs.

But Gen. Raymond was prepared to hit the ground running. He'd had four Air Force Space Command assignments already plus a host of space-related leadership posts including commanding the 5th Space Surveillance Squadron at Royal Air Force Feltwell, England, the 21st Space Wing at Peterson AFB, Colorado and the 14th Air Force, United States Strategic Command, Joint Functional Component Command for Space. He also had served as director of Space Forces in support of Operations Enduring Freedom and Iraqi Freedom.

Gen. Raymond shared his perspectives on what the next few years may bring, responding to written questions submitted by Inside GNSS on the future of the GPS program in these changing times.

INTERVIEW continued on page 4
REORGANIZING continued from page 1

like to simplify a fragmented management system that comprises dozens of stakeholders across a myriad of organizations.

The Government Accountability Office (GAO), which has identified more than 50 military space decision makers, has repeatedly pointed to the GPS program as an enterprise that would benefit from an overall update of military space management. But would it?

Experts’ View

Martin Faga, former director of the National Renaissance Office and a former assistant secretary of the Air Force for space, believes there is “real hope” for improvement if the number of players can be pared back.

In testimony before the House in September he pointed out that there were 56 organizations at eight levels above the program manager that review some space programs. Those program managers are also stymied by “permissions,” he said. That is the program manager has the authority to take an action but not permission from up the line. “This effectively removes author- ity thought to be granted,” wrote Faga in his testimony.

As a key member of the National Space-Based Positioning, Navigation, and Timing (PNT) Advisory Board, Faga has particular insight into how the different proposals might impact the GPS program. He told Inside GNSS he’s generally cautious about new organizations adding that, ultimately if the number of decision makers doesn’t change “things aren’t really going to get better.”

Based on his experience working on Capitol Hill before going to NRO, Faga suggested a more organic approach to devising a new management structure.

“What you want to do is tell the administration, as broadly as you can, what you expect — (then) let them come up with a solution. Because they know the bureaucratics, they know all of the interactions that occur and have to occur. Let them work it out and keep pounding the table for: ‘Where’s your answer?’ and ‘Where’s a good answer.’ ” Put it on the administration, he said, to come back with a solution that the lawmakers can improve.

Improving the current situation is essential, said Doug Loverro, who most recently served as deputy assistant secretary of defense for space policy.

“I think it’s critical that we go ahead and address the management, the central- ization of management,” he told Inside GNSS. “Now whether or not we’re going to be able to do that in terms of whether or not legislation will allow that to happen, we’ll have to see. But it’s critical that we do that.”

As a former director of both the GPS Joint Program Office and the Space and Missile Systems Center, Loverro understands how changes might impact modernization. You don’t want to centralize authority within the Department of Defense (DoD) for things like user equipment, he said, you want to centralize oversight.

“Right now there’s nobody focused on the question who actually understands the development timelines of the user equipment. So you need a knowledgeable source, a knowledgeable set of individuals, who can understand those and can make recommendations to each of the departments and to the secretary (of defense).”

The job of the person focused on user equipment is to make sure all the services are aligned. “And if they’re not aligned,” said Loverro, “he gets to say ‘Mr. Secretary, they’re not aligned. Would you like to align them or not?’ ”

The people now looking at these issues are at “much too high a level,” Loverro said, and don’t know the programs. As a result they don’t understand integration issues like how long it takes to integrate (M-code receivers) into a B-2 bomber versus a Humvee.

“You want somebody at the higher level who can understand that and say: ‘Oh the Army. Yes sir. The Army is three years behind but that’s because they don’t have depot maintenance scheduled for these platforms…So you want a person who has sufficient knowledge of program, the capabilities and the platforms — (someone) who can go ahead and make recommendations to say: Let’s adjust this.”

That effort, he added, needs to be sustained across time and personnel changes.

“You need a consistent office that can do that on a year-by-year basis,” said Loverro, “looking at these things and understanding these things across the department.”

Maj. Gen. Jim Armor (Ret), who was system program director for the GPS Joint Program Office before later serving as the director of the National Security Space Office, agrees that the key is more at the hands-on level.

“In his personal opinion, he said, simplifying top lines of authority could help but the improvements would be largely at the margins. The users need to come together, he said, and the GPS program needs to simply work through its challenges.

“We’ve got to get through the development of OCX. We’ve got to just continue to do the engineering support — and they don’t do any of that in the Pentagon.”
NavtechGPS to Host 16th Annual Open Mic Night at ION GNSS+ 2017

New Night, Wednesday. FREE Bus to Event

Join us again this year to enjoy the many talents of fellow scientist and engineers and rock the night along. The band — best known in the GNSS world as The Augmentations — complete with back-up singers, the Pseudorandom Noise, promises to be a fun-filled evening of music, dancing, Karaoke and a fun photo booth, with on-the-spot prints to memorialize the occasion.

The Bohemian Chic crowd (all ION GNSS Attendees invited) can gather for Portland Rhapsody 2 via a FREE OMN party bus, Wednesday, September 27, from 8 p.m. to midnight at the Crystal Ballroom (1332 West Burnside Street). Hop-on-hop-off service runs all night until 12:30 a.m. The red and gold buses will start at OCC at 8 for the first half hour after the Exhibitor Hosted Reception. Then, the Gold Bus will circle between the Duniway Hilton (SW 6th and SW Taylor) and the Crystal Ballroom and the Red Bus will circle between the Quality Inn (NE Multnomah and NE Grand) and Crystal Ballroom and back.

Pick up an informational postcard with more details from any of the sponsor booths: NavtechGPS, InsideGNSS, Inside Unmanned Systems, GPS Networking, RX Networks, Syntony, Spectracom, LabSat, VectorNav and Hemisphere GNSS.

If you are interested in performing, just let Carolyn McDonald know (cmcdonald@navtechgps.com).

If interference has prevented you from attending Open Mic Night in the past, you might want to double check your bandwidth and navigate down to the Crystal Ballroom on Wednesday night! There’s no such thing as being late unless you arrive after midnight.

Published by Inside GNSS in cooperation with the Institute of Navigation

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Finally, we are extremely focused on completing development for the Military GPS User Equipment (MGUE) program’s M-Code receiver card for ground users. M-Code is a new, secure signal for military users that is a capability of the GPS III system. We are also working toward our first security certification for an aviation/maritime user receiver card. We’ve had progress with prototype M-Code capable receivers that were integrated and tested on the B-2 Bomber during four flight tests in June 2017, but we need to continue this progress to support our next phase of Operational Test & Evaluation planned with the four lead platforms.

**Inside GNSS**

As you work to implement the Space Enterprise Vision, what measures do you envision taking to protect GPS capability against hostile actions in space?

**Gen. Raymond**

We’ve actioned the Space Enterprise Vision in a series of distinct lines of effort, called the Space Warfighting Construct — it’s a framework for making the SEV a reality. One line of effort within the construct is a focus on employing a resilient architecture for all AFSPC [Air Force Space Command] systems, including for all three segments of the GPS Enterprise (space, ground and user equipment). These architectures will employ multiple mission assurance attributes to ensure we are able to deliver persistent, critical space warfighting capabilities.

**Inside GNSS**

Monitoring of the civil GPS signals, including paying for such monitoring, continues to be a concern. While everyone, including the Defense Department, benefits from civil GPS signals, Congress has failed consistently to fully fund the budget request for civil signal monitoring. As the GPS Next-Generation Operational Control System (GPS OCX) evolves, the approach to such monitoring capabilities also may evolve and change. How will you approach civil signal monitoring, especially given these challenges?

**Gen. Raymond**

The GPS Next-Generation Operational Control System will provide programmed-in civil signal and military signal monitoring. The Department of Transportation (DoT) has expressed interest in enhanced civil signal monitoring capabilities beyond those provided by OCX and they are the lead for these potential enhancements.

**Inside GNSS**

The Air Force is looking at options for future iterations of the GPS constellation that may not have been fully considered before, for example satellites with a shorter design life. What are you hoping to achieve with such changes and why not implement some of these changes earlier?

**Gen. Raymond**

The Air Force Space Command seeks to build resiliency across the entire space enterprise. A key pillar in resiliency is rapid refresh and/or recovery. AFSPC Space & Missile Systems Center is investigating alternative constellation possibilities to enable rapid changes in the next generation of GPS. These potential changes, while promising, are in the early stages of maturity, and implementation risk must be balanced with maintaining the vital global service that billions of GPS users depend on every day.
WOMEN IN PNT

Meeting with Leaders and Legends

Wednesday, September 27, 12:15 p.m. – 1:45 p.m.
Oregon Ballroom 201

Now in its third year, the Women in PNT event provides an outstanding opportunity for women who are in the early stages of their careers to meet positioning, navigation and timing leaders in a stimulating and supportive environment.

The program is designed to provide participants a brief, ice-breaking, face-to-face meeting with GNSS legends and leaders from industry, academia and government representing a wide variety of interests and specialties — the professionals who have literally created and shaped today’s positioning, navigation and timing platforms.

The event will be organized in a round-robin interview style, where you will have approximately two minutes to talk one-on-one with one of the invited leaders, and then will move to another leader, then another. These brief meetings will make it easier for you to engage later with these and other professionals during the remainder of the ION GNSS+ meeting and beyond.

You are encouraged to come to this event prepared with 1) a short statement about yourself — who you are, your goals and experiences, etc., 2) prepared questions and 3) printed contact/business cards. Additionally, think about what you want from these meetings. This Women in PNT event promises to be your most important networking opportunity of the year. All the big names, all in one place, waiting to meet and engage with you.

For advance information and biographies on GNSS legends and leaders that will be participating in this year’s event, please see https://www.ion.org/gnss/special-events.cfm

Following the formal exercise, an informal networking lunch will be provided to all event participants. Please arrive at the event promptly as the event’s design will make it difficult to join late.

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Spirent Partners with Cranfield University on Autonomous Vehicle Technology

Spirent Communications last week announced a partnership with Cranfield University, a global leader for education and transformational research in technology and management. The two organizations will be collaborating to develop connected autonomous vehicle (CAV) technologies.

The aim of the research project is to improve positioning and timing technologies to enable better performance of unmanned vehicles, such as autonomous aircraft or connected cars. Spirent engineers are working with Cranfield’s postgraduate researchers to develop new methods for synchronization and location testing, using Spirent’s advanced test systems. The project will use Spirent’s GSS7000 Series of Multi-GNSS, Multi-frequency Simulators.

“Creating new ways to verify that autonomous vehicles are in exactly the right place is critical to the development of CAVs,” said Prof. Rafal Zbikowski, Professor of Control Engineering at Cranfield University. “Spirent has been verifying GPS/GNSS receivers for 30 years so they have a lot of knowledge that will be very useful to our researchers.”

Mark Holbrow, head of engineering at Spirent’s Positioning Business Unit, said “Location awareness for autonomous vehicles is of major importance, and is one of the most challenging applications in commercial GNSS development. We will be working with Cranfield to create new test and development tools that will provide the opportunity for improved system performance, accuracy and resilience”.

Spirent is supporting several Individual Research Projects (IRP) in Cranfield’s Autonomous Vehicle Dynamics and Control (AVDC) MSc program as an industry partner. The projects already identified are “GPS-Based Clock Synchronization for an Airborne Distributed Sensor Network” and “In-car mapping and receiver integration testing for autonomous vehicles”. The GSS7000 Series offers simultaneous coherent GPS, GLONASS, BeiDou, Galileo, QZSS and SBAS signals from a single test scenario. Up to 256 channels provide ample signals for a wide range of development, integration and verification tasks, according to the company.

For more information on Cranfield University, visit: https://www.cranfield.ac.uk/press, and for more information on Spirent stop by Booth: A at ION GNSS+ 2017.

NavtechGPS to Offer Advanced Receiver Processing of GNSS Signals at ESTEC, Noordwijk, The Netherlands. October 23-26, 2017

Dr. John Betz will be teaching Course 541: Using Advanced GNSS Signals and Systems at ESA/ESTEC, Noordwijk, The Netherlands, October 23-26, 2017. This intensive and unique NavtechGPS course enables attendees to achieve proficiency, not merely familiarity, with the essential aspects of using GPS/GNSS signals and systems. This course addresses current and future GPS signals and drills deep into the details from other satellite-based positioning and timing systems. Receiver processing techniques are described along with ways to characterize performance. Review problems, worked in class, help students understand and apply critical concepts to take advantage of signals from multiple systems. Stop by Booth: 318 for details or contact McDonald at CMcDonald@navtechgps.com.

SBG Systems Launching SBG +Services, a Full Set of Technical Services for its Inertial Sensors

SBG Systems is adding to its catalog a full set of technical services called the “SBG +Services”. Dedicated to surveyors as well as integrators, these services are designed to increase productivity by enhancing utilization efficiency and bringing clever solutions to daily project challenges.

Choosing an inertial sensor is more than matching technical specifications. Professionals face other challenges such as training a new employee, ensuring a production with minimum interruptions, or simply securing a budget during several years. To address these needs and more, SBG Systems built a whole range of services: the SBG +Services.
Get to Know Your Sensor

Saving time when integrating new equipment is critical, and SBG Systems offers three different ways to get introduced to your SBG inertial sensors. The first one is the "Online Initiation", a two-hour session with an SBG Support Engineer using a remote-access software. The second is a "On Demand Training" that takes place at an SBG office or at the customer’s place. The last one is a "Intervention Day", a pre-paid day that can be used for training, but also for installation or on-site support.

Certify Sensor Performance

Every SBG sensors is factory calibrated in dynamics and temperature and delivered with a calibration report certifying the sensor performance for three years, according to the company. All SBG inertial sensors are based on the MEMS (micro-electromechanical systems) technology, so there is no need to periodically calibrate them. Yet, some projects require certifications. The Check & Calibration service includes a quality check, a firmware update, cleaning, and if required, calibration in temperature and dynamics. A certificate is delivered with the sensor. It guarantees the quality of the sensor data for three years.

Ensure a Continuous Production

Professionals such as surveyors can be highly penalized in case of production interruption. By selecting the "Back-up System" service, the customer has access to a replacement device if the original sensor requires a planned or unplanned factory return.

Additionally, all SBG inertial sensors (Ellipse, Ekinox, and Apogee) come with a 2-year warranty — the warranty can be extended up to 5 years. The company, which supplies MEMS-based inertial motion sensing solutions, has been providing a wide range of inertial solutions from miniature to high accuracy. Combined with cutting-edge calibration techniques and advanced embedded algorithms, SBG Systems products are well-suited solutions for unmanned vehicle control, antenna tracking, camera stabilization, and surveying applications.
Skydel Releases SDX 17.8 Featuring Advanced Jamming Option

Montreal, Quebec-based Skydel Solutions has released SDX 17.8 software-defined GNSS simulator just in time for ION GNSS+. SDX users now get a host of improvements, according to the company. The 17.8 release menu features, among other things: Gaussian noise, spectrum view and GUI improvements, as well as Advanced Jamming.

Advanced Jamming is an option new to SDX that brings unique interference testing capabilities to SDX users. It leverages the power of the GPU/software-defined radios (SDR) combo to create an unheard-of way to simulate interferences, Skydel states, enabling transmitter trajectories and user-defined waveform creation. It’s designed to be very intuitive and powerful.

SDX release 17.8 brings advanced interference capabilities to SDX, including:

- Create user-defined waveforms. Chirp, CW, BOC, AWGN, BPSK, and pulse interference modulation are supported and can be combined at will to create custom, complex interference waveforms.
- Create multiple real-time jammers. Create a single or multiple jammer transmitter(s) with user-defined waveforms. Up to 100 interferences can be generated in real time.
- Add dynamics to transmitters. Create realistic jammers for your simulations; SDX’s jammers can change position relative to the receiver as the simulation progresses. During the simulation, SDX automatically calculates the resulting jammer’s signal power at the receiver antenna in real-time and takes into account the transmitter antenna pattern, the propagation loss, and the receiver antenna pattern.
- Use simple transmitters. Create simpler transmitters whose power level is defined from the receiver point of view (as if attached to the receiver).
- There’s no need for additional hardware. Advanced Jamming uses the same hardware combo (GPU/SDR) and is fully integrated into SDX’s GNSS simulation.

SDX’s Advanced Interference allows many new possibilities, including: complex jamming and spoofing scenarios involving land, sea or air vehicles; complex waveform generation for compliance testing and GNSS receiver testing; generation of out-of-band interference for non-GNSS interference scenario replication.

SDX is multi-frequency (upper and lower L-band) and multi-constellation. SDX uses GPU-accelerated computing and SDR, and is available as complete turnkey systems or software only. Since it is software-defined and uses COTS hardware, it is designed to provide the following benefits: unparalleled upgradability, hardware reuse and economy, advanced features, and high performance/precision. It is suited for design and validation of GNSS receivers, complex integration, academic research, NAVWAR and test engineering.

The company will demonstrate SDX’s latest features at Booth: 100. Additionally, Skydel’s CTO Iurie Ilie will host a technical session about spoofing on Friday, Sept. 29 — Session B5: Applications in Sectorial Policies.

ION EXHIBITORS continued on page 10
Nominate a Colleague for ION Fellows and Annual Awards

Nominations for ION Fellows and Annual Awards are now being accepted. The ION Annual Awards Program is sponsored by The Institute of Navigation and recognizes individuals making significant contributions or demonstrating outstanding performance relating to the art and science of navigation.

Submit your nominations today for ION’s Fellows and Annual Awards at ion.org/awards. Nominations are due October 15th. The Institute accepts nominations for the following annual awards:

- **Early Achievement Award** recognizing an individual early in his or her career who has made an outstanding achievement in the art and science of navigation.
- **Superior Achievement Award** recognizing individuals who are practicing navigators and have made outstanding contributions to the advancement of navigation.
- **Distinguished PTTI Service Award** recognizing outstanding contributions related to the management of PTTI systems.
- **Captain P.V.H. Weems Award** recognizing contributions to the art and science of navigation.
- **Tycho Brahe Award** recognizing outstanding contributions to the science of space navigation.
- **Norman P. Hays Award** recognizing outstanding encouragement, inspiration and support contributing to the advancement of navigation.
- **Colonel Thomas L. Thurlow Award** recognizing outstanding contributions to the science of navigation.

Election to Fellow membership recognizes the distinguished contribution of ION members to the advancement of the technology, management, practice and teaching of the arts and sciences of navigation, and/or for lifetime contributions to the Institute. Fellow presentations and Annual Awards will be presented during the ION International Technical Meeting (ITM) and Precise Time and Time Interval Meeting (PTTI) to be held January 29-February 1, 2018 at the Hyatt Regency Reston in Reston, Virginia.

Submit your nominations today!
Trimble Expands Portfolio of OEM Products for High-Accuracy Direct Georeferencing on UAVs

Trimble introduced Tuesday three new GNSS-Inertial Systems for Direct Georeferencing on Unmanned Aerial Vehicles (UAVs): the Trimble APX-15-EI UAV, Trimble APX-18 UAV, and Trimble APX-20 UAV. Direct Georeferencing with the systems allows the location of image elements collected by Light Detection and Ranging (LiDAR) and hyperspectral sensors to be accurately computed without extensive networks of ground control points, reducing costs while maintaining accuracy to produce maps.

The announcement was made at INTERGEO 2017, the world’s largest conference on geodesy, geoinformatics and land management, Tuesday in Berlin.

The innovative APX-15-EI UAV features dual inertial measurement units (IMU); one embedded onto the GNSS-Inertial board that is mounted on the UAV airframe with the GNSS antenna, and one that is mounted on an external sensor contained in a gimbaled mount. With this feature, the APX-15-EI UAV can compute two sets of orientations — the UAV airframe and the gimbaled mount — enabling automatic, precise positioning of the sensor without requiring an external interface to the gimbaled mount or autopilot.

The APX-18 UAV is a single-board GNSS-Inertial solution that supports two antennas heading for the highest accuracy in low-speed multi-rotor survey applications such as building facade scanning. Measuring just 10 cm x 6 cm and weighing only 62 grams, the APX-18 UAV uses on-board inertial sensors calibrated with the Applanix SmartCal software compensation technology for superior performance in a small, compact form, which is said to be ideal for UAVs.

To meet the higher accuracy demands driven by the allowance of higher altitude, Beyond Visual Line of Sight (BVLOS) UAV flights, and the introduction of higher resolution, larger format imaging sensors, Trimble has developed the APX-20 UAV. Also, featuring dual IMUs for automatic gimbaled mount support, the APX-20 UAV uses a new, MEMS-based lightweight external IMU with unparalleled performance. With a total weight of less than 425 grams, the APX-20 UAV provides high performance without sacrificing flight time.

“We are very pleased to announce these new additions to our portfolio of products for Direct Georeferencing on UAVs,” said Joe Hutton, Director of Inertial Technology and Airborne Products at Applanix, a Trimble Company.

The APX products use low noise, multi-frequency Trimble Maxwell GNSS technology, and track all current satellite signals including GPS L1/L2/L2C/L5 and GLONASS L1/L2, QZSS, BeiDou, IRNSS and Galileo, supporting SBAS, RTK and Trimble CenterPoint RTX positioning modes.

Trimble GNSS Smart Target Base Station

Also on Tuesday in Berlin, Trimble announced the release of the Trimble GNSS Smart Target Base Station for high-accuracy mapping from Unmanned Aerial Vehicles (UAVs).

Comprised of a survey grade, multi-frequency, multi-constellation GNSS reference station complete with a foam Ground Control Target with integrated carrying case, the Smart Target Base Station logs the raw GNSS observables required to perform centimeter level post-processed Differential GNSS positioning of UAVs, and acts as a photo-identifiable Ground Control Point (GCP) for quality control.

Cost effective, simple to operate, and supported by both the Applanix POSPac UAV GNSS-Inertial post-processing software for Direct Georeferencing on UAVs and Trimble UASMaster Photogrammetric software, the Smart Target Base Station makes aerial mapping from UAVs easier than ever. Simply place the foam target with its receiver in the project area, stake it down. With the included Smartphone app or web UI, users can remotely begin logging the raw GNSS observables data collected by the target that is required for post processing. At the end of the mission, retrieve the target and download the raw GNSS data along with the data collected from the Trimble APX UAV GNSS-Inertial system installed in the UAV. Global coordinates of the reference station are computed automatically using the Trimble Centerpoint RTX post-processing service in POSPac UAV, or if local coordinates are desired, the foam target can be centered over an existing reference point.
Public Comment Open

ION’s GNSS Software Defined Radio Metadata Standard

The Institute of Navigation’s GNSS Software Defined Radio Metadata Standard working group is seeking public comment on the standard through December 31, 2017.

In recent years there has been a proliferation of software defined radio (SDR) data collection systems and processing platforms designed for Global Navigation Satellite System (GNSS) receiver applications or those that support GNSS bands. For post-processing, correctly interpreting the GNSS SDR sampled datasets produced or consumed by these systems has historically been a cumbersome and error-prone process. This is because these systems necessarily produce datasets of various formats, the subtleties of which are often lost in translation when communicating between the producer and consumer of these datasets. This specification standardizes the metadata associated with GNSS SDR sampled data files and the layout of the binary sample files.

The GNSS SDR Metadata Standard defines parameters and schema to express the contents of SDR sample data files. The standard is designed to promote the interoperability of GNSS SDR data collection systems and processors. The metadata files are human readable and in XML format. A compliant open source C++ API for reading metadata and binary samples is also officially supported to promote ease of integration into existing SDR systems.

The formal standards document is available by going to sdr.ion.org.

Comments may be made by going to sdr.ion.org and clicking on “Submit a Comment.”

Public comments are being accepted through December 31, 2017.
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