IN THIS ISSUE

• Introduction
• Industry Spotlight
• Events
• Membership Services
• Working Groups
• WiMAX Forum News
INTRODUCTION

Dear Respected Colleagues,

Another year has now gone by, and we would like to take the opportunity to express our sincere gratitude for your continuous support and enthusiasm. Your insights, wisdom and unceasing collaboration allowed us to produce important work to advance the Aeronautical Mobile Airport Communication System (AeroMACS), WiGRID, and the WiMAX technology.

It is clear that 2020 was challenging, however thanks to the generosity, commitment, contributions, collaboration and participation of our Board of Directors, Member Companies and Working Group Representatives and industry experts we were able to continue the expansion of our services, achieved significant milestones and positioned the organization to succeed in this ever-changing global environment.

AeroMACS has gained especial momentum this year and added value to the broader aviation industry. With the collaboration of key players, AeroMACS has been demonstrating immense potential and benefits as the technology selected to support the safety and regularity of flights.

In 2020, the WiMAX Forum has focused on enhancing the relevance of AeroMACS to the aviation stakeholders with several activities. We have announced that Siemens has achieved the WiMAX Forum AeroMACS Certification while products from distinct manufacturers are currently in the lab to complete testing to receive full AeroMACS Certification.

Throughout the year, the WiMAX Forum hosted Virtual Presentation Sessions prepared to provide relevant details and keep the audience informed on the latest AeroMACS and WiMAX Forum developments, worldwide deployments and applications, security through the WiMAX Forum Public Key Infrastructure (PKI) Policy and other topics.

Companies participating include: ADCC, Avicom Japan, CelPlan Technologies, ConvergEX Technologies, DigiCert, Eonti, EUROCONTROL, FAA, Honeywell, ICAO, Leonardo, Lisbon Airport, NASA, Powertech Labs, Siemens, Skymantics, and Telrad Networks.

Sessions are available in multiple online channels including the WiMAX Forum Website, YouTube and social media. To review all presentations, please click at the following link: http://wimaxforum.org/Page/News/Videos.

As this coming year promises further momentum, we will continue to push forward to bring the highest value to the WiMAX community as the market share expands. Our focus has been to share key lessons, concrete knowledge, and work together for the benefit of the industry. Here is the summary of an upcoming event that we are participating during the coming months:

• **On February 4, 2021 at 8 am PDT**, at the Sparring Partners Webinar "Wireless connectivity in airports with AeroMACS," Declan Byrne, WiMAX Forum, Pedro Ponte, Lisbon Airport, Antonio Correas, Skymantics, and Monica Paolini, Senza Fili, will talk about the role of AeroMACS in
private networks in airports and reflect on the lessons learned from initial deployments. For more information and registration please visit: https://senzafili.com/webinars/wireless-connectivity-in-airports-with-aeromacs/.

- **On April 19, 2021**, the WiMAX Forum plans to participate in the ICNS Virtual Conference. As details are finalized, we will be certain to keep you informed. For more information, please visit: https://i-cns.org/.

- **On October 26, 2021**, the WiMAX Forum plans to participate in the World ATM Congress in Madrid. As details are finalized, we will be certain to keep you informed. For more information, please visit: https://www.worldatmcongress.org/home.

The WiMAX Forum will keep busy preparing for exciting meetings and events in person and virtually to raise awareness about the benefits of the AeroMACS and WiMAX technology. Please stay tuned and for more information, visit: WiMAXForum.com.

As we move into 2021, the **WiMAX Forum** is well positioned to face any future challenges, develop opportunities to grow business and leverage its stakeholders. We will be in touch with members about the 2021 renewal cycle and as always, we stand ready to answer any questions that you may have. For more information regarding your membership status, please email Membership@wimaxforum.org.

Please reach out to us if you have any questions or comments. We wish you a healthy and happy holiday season and we look forward to speaking with you soon in the next year!

Best Regards,
WiMAX Forum

**INDUSTRY SPOTLIGHT**

The WiMAX Forum maintains a bustling schedule of public appearances, white paper publications, webinars, and press releases on behalf of our industry. Below you can find the most relevant activities and latest communications.

- **NASA Helps Bring Airport Communications into the Digital Age**

Some of the best entertainment at the airport is all the action outside the window. Loaded luggage carriers zip past on their way to planes. Fuel trucks come and go. Catering trucks restock galleys. During winter, de-icing crews and snowplows add to the bustle. This organized chaos is overseen by the ground-control managers as part of an airport-wide effort to ensure the safety of all ground operations. And as air travel has increased, the challenge of keeping track of all the moving parts has only grown.

To read complete publication, please click [here](#).
**CelPlan Technologies – ICNS Paper Award**

CelPlan Technologies participated in the 20th Integrated Communications, Navigation and Surveillance (ICNS) Conference. The CEO/CTO, Leonhard Korowajczuk, won the Outstanding Paper Award at the conference for his paper "Full Apron Visibility design." The apron area is key for an airport operation, but today it lacks automation and visibility. The industry has assigned to it a valuable exclusive spectrum under ITU AM(R)S and a dedicated technology known as AeroMACS, which should be used to provide the required automation and visibility.

**To read complete paper, please click here.**

**EVENTS**

In the coming months, the WiMAX Forum will host, participate, attend, and support events globally. We continue our efforts to bring you quality conferences hosted by the WiMAX Forum, and we will present and participate at key industry events. The WiMAX Forum team looks forward to seeing you at these events.

**Upcoming Events:**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Location</th>
<th>More Information</th>
</tr>
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<tbody>
<tr>
<td>5th Annual Smart Cities International Virtual Symposium</td>
<td>February 23-24, 2021</td>
<td>100% Online</td>
<td><a href="#">Smart Cities International</a></td>
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<tr>
<td>6th Smart Cities India 2021 Expo</td>
<td>March 24-26, 2021</td>
<td>New Delhi, India</td>
<td><a href="#">6th Smart Cities India</a></td>
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<tr>
<td>Connected Manufacturing Forum</td>
<td>July 29-30, 2021</td>
<td>Austin, TX</td>
<td><a href="#">Connected Manufacturing</a></td>
</tr>
<tr>
<td>IoT Solutions World Congress</td>
<td>October 5-7, 2021</td>
<td>Barcelona, Spain</td>
<td><a href="#">IoT Solutions World Congress</a></td>
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The WiMAX Forum plans to host and participate in other events over the course of the year. As details concerning these events are finalized, we will be certain to keep you informed. For more information about our events, please visit: WiMAX Forum Events.

**MEMBERSHIP SERVICES**

The **WiMAX Forum Membership** provides a wide range of **benefits and services** that promote growth and innovation of AeroMACS, WiGRID, and WiMAX technology.

Only WiMAX Forum Members can **certify** products to guarantee interoperability and standard compliance for AeroMACS, WiGRID, and WiMAX; secure networks using **Public Key Infrastructure (PKI)** certificates; develop technical specifications; influence favorable regulatory environments; and contribute to the growth of the industry through standards development that satisfy the market needs, among other advantages.

The WiMAX Forum is committed to delivering the value necessary for our members to get the most from their membership, and we are always engaging with individual members to discuss how we can better serve them. If you are interested in speaking with our leadership team on our specific initiatives or have any questions, please send a message to Membership@wimaxforum.org.

**The WiMAX Forum is the best place to access, leverage, and influence the growth and development of the AeroMACS, WiGRID, and WiMAX Technology. So be a leader and step up to get involved today!**

**WORKING GROUPS**

The WiMAX Forum organizes its technical activities through a number of **Technical Working Groups**, that are the key to the development of WiMAX technology. The Working Groups are the currently focused on a number of activities related to **AeroMACS, Smart Energy**, through product certification and various spectrum access solutions and participation is open to all WiMAX Forum Members.

The Aviation Working Group (AWG) members have collaborated throughout the year and made tremendous progress on several technical projects including: the development and maintenance of specifications related to AeroMACS Product Certification, AeroMACS Public Key Infrastructure (PKI), FCC AeroMACS Petition for Rulemaking, Online Conferences, Webinars and other initiatives to support AeroMACS as the standard selected to improve the safety and regularity of flights.
The AWG Certification Task Group (CTG) completed very important milestones. After years of work to develop standardized lab tests to verify product conformance this year, Siemens became the first AeroMACS Equipment Manufacturer to receive complete AeroMACS certification. The AeroMACS Designated Certification Laboratory (ADCL) now has products from other manufacturers in the lab completing testing to receive full AeroMACS Certification. The AeroMACS certification process is based on a set of requirements and standards defined by the aviation industry.

The AeroMACS PKI is provided by the WiMAX Forum in partnership with Eonti as the Management Authority (MA). Eonti is responsible to manage and implement AeroMACS PKI to ensure AeroMACS operational networks are secure. AeroMACS PKI is commercially available and an overview of the AeroMACS PKI process is available here: AeroMACS PKI Users Overview.

The WiMAX Forum and Smart Energy Working Group (SEWG) members are working with IEEE to bring to market devices for narrowband applications and other sub 1GHz spectrum. The IEEE 802.16t project specifies operation in licensed spectrum for mission critical entities that have a strong preference for private, licensed networks for their data communications needs.

The WiMAX Forum Working Groups is chartered to bring industry leaders together to collaborate and contribute to the development of technical specifications, technical requirements, harmonization of documents, and provide coordinated recommendations to advise the Forum. For more information on our Working Groups, please visit: www.wimaxforum.org/Page/About/Working-Groups.

It is a crucial time for your organization to participate, influence and leverage the Working Groups activities, and contribute to the development of the market. If you are interested in participating in our Working Groups, please contact us at info@WiMAXForum.org and we will be happy to speak with you about this opportunity.

Working Group activity is integral to the success of the Forum, and your participation is important to the WiMAX community!

WiMAX FORUM NEWS

The WiMAX Forum weekly Newsbrief contains the summary of news from around the WiMAX ecosystem and is intended as a benefit to our community. If you do not yet receive the Newsbrief and wish to do so, please sign up here: WiMAX Newsbrief.

Below is a summary for the month of December:

- NASA Helps Bring Airport Communications into the Digital Age
- Video - AeroMACS System Implementation at Lisbon Airport
- New era for airport communication – Siemens is the first vendor globally to achieve AeroMACS certification
- Delivering a digitally-enabled aviation infrastructure
- ICAO APAC Webinars Fundamentals of ANS
- CelPlan Technologies – ICNS Paper Award
- PKITrust eBook from DigiCert
- European Commission calls for experts on Intelligent Transport Systems
- ‘6G to satisfy the expectations not met with 5G’: 6G Flagship Program
- Airline industry after 9/11 and Covid-19
  > EUROCONTROL Five-Year Forecast 2020-2024
- Cybersecurity in the Aeronautics Industry
- NASA Spinoff Publication - 2021 Edition
- ETSI Magazine - Drive, Fly and Navigate With ETSI Standards
- Compatibility and Standards Key to Introducing New Aviation Spectrum Applications in US
- Equatorial Guinea could be the first African country to implement the AeroMACS communications system at its airports
- Advancing the Standards for Unmanned Air System Communications, Navigation and Surveillance
- Data Link Implementation in Europe [COM-DLK]
- WiMAX Forum Virtual Presentations
- Supply chain risk and resiliency in an age of uncertainty
- FCC Report Supports Use Of 5030-5091 MHz Spectrum Band For Unmanned Aircraft System Operations
- How innovation supports continuous descent operations
- Combating The Other Virus
- IEEE standards are critical to grid mod and other utility priorities: You should help develop them
- Civil-Military CNS Interoperability Roadmap
- ICAO urges agility, partnership to hasten pace of aviation innovation
- DigiCert and Atea deliver a fully managed service for multiple types of digital certificate-based use cases
- Connectivity crisis threatens global recovery
- Leonardo: 200 million euros financing from the European Investment Bank in order to fund Investments in technological development
- Routes Reconnected: The importance of ICAO’s pandemic role and responses
- Smart Cities International Symposium
- Major Breakthroughs Registered in BeiDou as It Passes All Technical Verification Standards of ICAO
- ACI World publishes year-end COVID-19 economic impact analysis
- Cyber-proofing your organisation: the new challenges for the CSO
- FAA, European Regulators Expand Aviation Safety Agreement
- DigiCert Enterprise PKI Manager Helps Organizations Deploy Digital Certificates To Secure Users, Devices And Applications
- China's Comac C919 nears certification
- ICAO President underscores importance of solidarity, innovation, and sustainability to sectoral recovery strategies
- Japan adds more than 1.7 mln mobile customers in September quarter
- Honeywell Aerospace CEO Talks Future Business Jet Avionics, Engines Roadmap
- EUROCONTROL: a vital forum for all stakeholders to agree recovery priorities
- Equatorial Guinea could be the first African country to implement the AeroMACS communications system at its airports
- ACI EUROPE Best Airport Award winners for 2020 announced
- RTCA November Webinar: Perspectives on the Future of Global Aviation Priorities with ICAO, FAA & RTCA
- DigiCert Enterprise PKI Manager Enhances Security for Remote Workforces
- ICAO President underscores importance of solidarity, innovation, and sustainability to sectoral recovery strategies
- FAA and NASA Complete Drone Demonstrations
- The crisis is also an opportunity for rebuilding Europe’s aviation system
- November 2020 WiMAX Forum Monthly Newsletter