LoRaWAN®

Creating Valuable IoT Connections

LoRa Alliance®

LoRaWAN®

CONTENTS

INTRODUCTION |
LoRaWAN®: The Right Time. The Right Choice.

2019 has been another major growth year for the LoRa Alliance®. We saw mass deployments sky-rocketed last year— leveraging our strong infrastructure of both public and private LoRaWAN networks. In 2019, we recognized more than 120 LoRaWAN network operators operational in more than 140 countries. As you'll see, we've been very active over the past 12 months, driving our members' businesses forward through a variety of activities.

First and foremost, we've strengthened our certification program, which is critical to the success of the Internet of Things (IoT). Customers and end users alike must have confidence that their devices will perform as intended over their full life span, often 10 or more years. To make it easier than ever to certify, we developed and launched the LoRaWAN Certification Test Tool (LCTT), allowing members to pretest devices at their own facility to ensure the devices work as expected and to accelerate the certification process. Additionally, in Europe, the Operator Qualification Program announced that devices must be LoRaWAN Certified[CM] to be connected to their networks—a program that will be extended to cover all geographic areas in 2020.

LoRaWAN technology is best-in-class and continues to be augmented and refined by our technical committee. Additionally, we are now supported by a full-time regulatory consultant and additional regional experts as required to lobby on LoRa Alliance's behalf around the world. These regulatory activities are of the utmost importance to keep the current spectrum available and to secure additional spectrum in new geographies.

Donna Moore,
CEO & Chairwoman, LoRa Alliance®

We've worked to make it easier than ever for all of our members to provide input into our activities. Any employee from any member company can now participate in some of our committees' working groups and regional task forces, and we can't wait to have their support and to benefit from their considerable insight. We've doubled the number of industry alliances we collaborate with, as no one single technology can address every IoT use case.

We have also expanded our outreach and increased global visibility through increased marketing activities, including trade shows, PR, content development, blogging and social media. This year, we rolled out the LoRaWAN® showcase, which is the only global resource of all LoRaWAN Certified^{CM} devices and related LoRaWAN products and services. New automation and CRM tools nurture leads, allowing us to more effectively educate web visitors and drive new business opportunities for our members. The list goes on and on!

As we look ahead to 2020, our fifth year as the leading LPWAN technology alliance, we're excited to enter this next phase of growth. Our Board has been hard at work engaging with members to plan our strategy for the next five years with a goal of simplifying IoT. To reach the projected billions of devices, we recognize that we must reduce deployment complexity and continue to support our members and the global LoRaWAN community as they roll out the technology across the globe. LoRaWAN has unlimited potential to drive sustainable businesses, protect the planet's resources and positively impact human lives.

I sincerely hope you will all join me in Paris for the LoRaWAN World Expo—the largest LoRaWAN event ever—where we will celebrate our success over the past five years and share our vision for connecting a smarter planet. These are exciting times, and I'm honored to work with our members to drive the LoRaWAN standard forward.

KEY FACTS & FIGURES
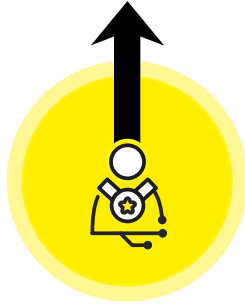
NEW MEMBERS
IN 2019:

+143

2019 SPECIFICATION
DOWNLOADS:
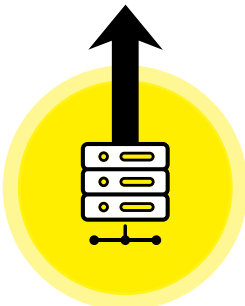
58,207

2019 CERTIFIED
PRODUCT GROWTH:

+45

2019 WHITE PAPER
DOWNLOADS:

6,636

- LoRaWAN & NB-IoT White Paper: **2,585**
- WiFi & LoRaWAN White Paper: **2,141**
- Connecting Utility Assets using LoRaWAN: **1,910**
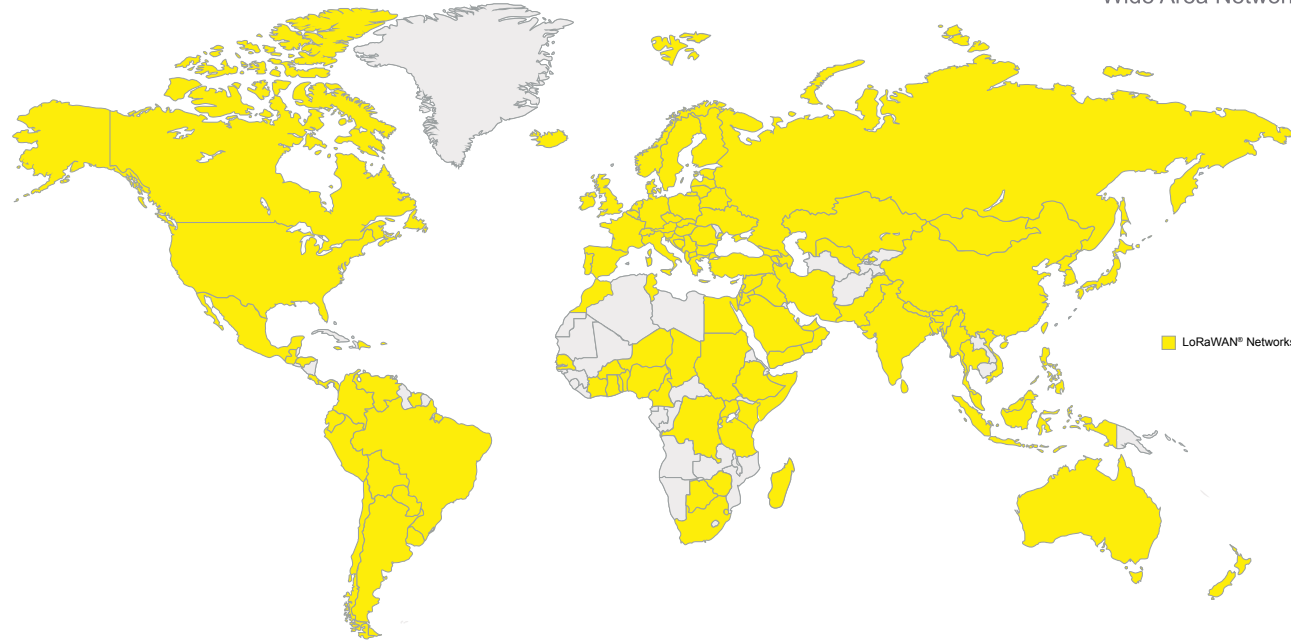
2019 LoRaWAN® NETWORK
OPERATORS ADDED:

+33

REGIONAL SPECIFICATION:

AS923 modified to support Indonesia,
Vietnam, Israel, Philippines, Cuba and
European 915MHz bands.

LoRaWAN® NETWORK COVERAGE

LoRaWAN® NETWORKS

LoRa Alliance®
Wide Area Networks for IoT

☐ LoRaWAN® Networks

July 2019

All information contained herein is current at time of publishing – LoRa Alliance is not responsible for the accuracy of information presented

END OF YEAR REPORT 2019
Approved for distribution outside of the LoRa Alliance®

LoRa Alliance®

LoRaWAN®

143 Countries with LoRaWAN deployments

133 LoRaWAN network operators

December 2019
All information contained herein is current at time of publishing – LoRa Alliance® is not responsible for the accuracy of information presented

LoRaWAN® NEWS HIGHLIGHTS

2019: 32,400 MENTIONS | 21 PRESS RELEASES | 364 TIER 1 ARTICLES

LORA SURPASSES 100 IOT NETS

Rick Merritt
Published: January 22, 2019

LORA ALLIANCE DRIVES LORAWAN USAGE IN UTILITY METERS WITH CLOSER DLMS INTEGRATION

James Blackman
Published: April 5, 2019

EXPERTS: ENTERPRISE IOT ENTERS THE MASS-ADOPTION PHASE

Jon Gold
Published: May 22, 2019

LORA ALLIANCE CLAIMS 75 PER CENT OF IOT BEST SUITED FOR LPWAN TECH

Ian Scales
Published: June 3, 2019

LORA ALLIANCE EXPANDS LORAWAN CERTIFICATION TESTING

David Manners
Published: June 4, 2019

SAVING ON CONNECTIONS TO AND IN THE FIELD

Robin Booker
Published: July 18, 2019

HOW AMAZON IS DEFINING THE SMART HOME

Stacey Higginbotham
Published: September 2019

INDIA'S LPWAN NETWORK GROWS TO MEET SMART CITY DEMAND

Nitin Dahad
Published: October 28, 2019

LORAWAN ON THE IOT TRACK

WCCN Editorial
Published: November 2019

2019 LoRa ALLIANCE® ANNUAL AWARDS

Corporate Award

- Semtech

- MultiTech

Lifetime Achievement Award

- Alper Yegin, Actility SA

Working Group Leadership Award

- Julien Catalano, Kerlink

- Olivier Beaujard, Semtech

Distinguished Service Award

- Dave Kjendal, Senet, Inc.

- Markus Ridder, IMST GmbH

- Xiaobo Yu, Alibaba (China) Co., Ltd

- Marc Le Gourrierec, Sagemcom Broadband SAS

- Ali Hosseini, SenRa Tech Pvt. Ltd.

- Diego Bartolome, DEKRA Testing and Certification, S.A.U.

LoRaWAN® DIFFERENTIATORS

The successful adoption and deployment of LoRaWAN is based in large part on a number of key differentiators, which make it the strongest LPWAN technology for a massive number of use cases. Key differentiators include:

- Firmware updates over the air (FUOTA)

- Different network deployment models that give freedom of choice to B2B customers (public, i.e., no need to license spectrum, and private networks)

- More than 100 million end devices are already deployed globally, making LoRaWAN the de facto LPWAN technology of choice for IOT solutions

- LoRaWAN is a future-proof, open source protocol developed through industry collaboration, allowing customers choice from a wide range of products

- Open ecosystem of developers delivering many solutions that can be used around the world

- Strength and coverage in all key vertical markets with numerous, sustainable use cases and documented ROI

- Open interconnection between any type of network (public, private, licensed or unlicensed operator)

- Strong liaison with the Wireless Broadband Alliance to enable network slicing and a strong joint market proposition presented in a very successful white paper

- Test tools and certification enhancements ensure optimal customer experience

CERTIFICATION COMMITTEE UPDATES

Our major initiative in 2019 was the commissioning and development of the LoRaWAN® Certification Test Tool (LCTT) for precertification testing of devices at the developer's site prior to sending it to one of the LA Authorized Test Houses (ATH) for formal certification. The LCTT has been made available to all LA members for free and will significantly accelerate the certification process and well as save time and money, allowing devices to be fully debugged to complete the final design earlier.

Another major initiative in 2019 was working with a significant group of public network operators in Europe to incorporate additional tests from their device qualification programs into the LoRaWAN Certification testing to avoid having the individual network operators perform these tests themselves, and instead mandating the use of LoRaWAN Certified^{CM} devices to be connected to their networks.

As part of a very successful members meeting in New Delhi, the LoRa Alliance® Certification Director was invited by the director general of the Telecommunication Engineering Center, as part of the Ministry of Communication for the government of India, to present the LoRaWAN Certification program to them. This was requested to assist them in establishing the requirements of certification for IOT devices in India.

Global registration of the LoRaWAN Certified^{CM} logo was achieved in 2019 for use by LoRa Alliance members who achieve certification of their LoRaWAN devices.

LoRaWAN CERTIFIED^{CM} AUTHORIZED TEST HOUSES

Two new LoRa Alliance® Authorized Test Houses were granted approval to perform LoRaWAN® Certification in India in 2019:

TÜVRheinland®
Precisely Right.

BENGALURU, INDIA

**DEKRA**

MUMBAI, INDIA

TECHNICAL COMMITTEE UPDATES

2019 was another active year for the Technical Committee (TC). It has finished generating the LoRaWAN® L2 1.0.4 spec, which is now in IPR review. This spec takes LoRaWAN L2 1.0.3 as the baseline, and applies several clarifications, bug fixes and backward-compatible enhancements imported from the LoRaWAN L2 1.1 spec. Per a newly agreed policy, the spec will be published along with the reference implementation and the associated certification program.

The Backend Interfaces 1.1 specification was also completed in 2019. This spec includes support for geolocation across roaming interfaces, and bug fixes. Publication of the specification is awaiting validation by the first vendor to implement this spec.

Roaming was another focus of the TC's efforts, and following interop among multiple network platforms from distinct vendors that was carried out in the Roaming Working Group, there are now 7 networks that have implemented operational roaming. Stages vary between trial to commercial for these implementations.

Additional development of FUOTA first rolled out last year and continued into 2019, with the **FUOTA Process Summary Technical Recommendation TR002 v1.0.0** published. Additionally, the FUOTA Working Group delivered the following:

- New specifications release candidates are in development (pending publication):

  - LoRaWAN Application Layer Clock Synchronization Specification TS003 v2

  - LoRaWAN Fragmented Data Block Transport Specification TS004 v2

  - LoRaWAN Remote Multicast Setup Specification TS005 v2

  - LoRaWAN Firmware Management Protocol Specification TS006 v1

  - LoRaWAN Multi Package Access Specification TS007 v1

  - Application Layer Package Design Guidelines TR003
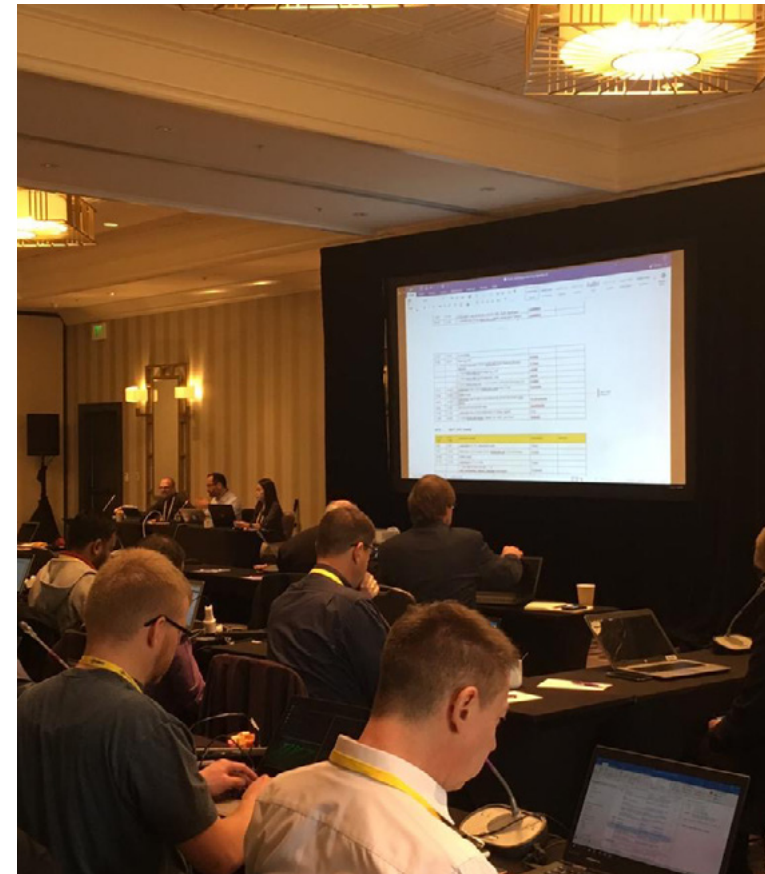
TECHNICAL COMMITTEE UPDATES

- New documents to support development and implementation of FUOTA:

  - FUOTA Interoperability Tests

  - Application Layer Design Guidelines

- First interoperability tests passed:

  - 7 companies

  - 10 successful interoperability sessions

  - Covering 3 regions

As a global technology, the importance of the TC's work to develop regional parameters cannot be understated. The LoRaWAN Regional Parameters RP002-1.0.0 was officially released November 1, 2019, covering:

- Summary of worldwide support and channel plan assignment

- Universal support for LoRaWAN® Layer 2 Specifications (both 1.0.x and 1.1.x revision tracks)

- Extensive clarifications (aligned with LoRaWAN TS001-1.0.4)

- CN470-510 was rewritten for current China regulatory considerations

TECHNICAL COMMITTEE UPDATES

Additionally, the LoRaWAN® Regional Parameters RP002-1.0.1 DRAFT prepared during 2019 is nearing completion and will be submitted to the TC in January 2020. In this document, AS923 is modified to support Indonesia, Vietnam, Israel, Philippines, Cuba and the European 915MHz bands.

The TC also focused on continued adaptation of widespread applications stacks to LoRaWAN, including DLMS and Wireless M-Bus. For DLMS, the LoRa Alliance® has established a liaison agreement with DLMS-UA. We have neared completion of the technical work, and published a highly downloaded white paper earlier this year: **https://lora-alliance.org/sites/default/files/2019-11/dlms-lorawan-whitepaper_v1.pdf.**

Additionally, TC members have been actively involved in IETF, defining the support for IETF SCHC over LoRaWAN, which enables both uplink-fragmentation and transportation of IP packets over LoRaWAN. This work is being used by the aforementioned DLMS work and may also be used by any other application with similar needs (use of IP, or transportation of payloads larger than the LoRaWAN frames). For clarification, this is about uplink fragmentation, whereas earlier specs published by the TC already provided support for downlink fragmentation.

Finally, TC members contributed to several sections of the eBook published this year, including security, activation, roaming, FUOTA and IP over LoRaWAN.

LoRaWAN Empowers Very Low-power, Wireless Applications

Editor-in-Chief: John Koon

TECH IDEA
tech idea international®

REGULATORY WORKING GROUP

In 2019, the LoRa Alliance® launched the Regulatory Working Group with the objective to keep the current spectrum available for LoRaWAN® and to secure additional spectrum in new geographies. This working group's 2019 highlights are called out below.

- **China:** adoption of regulation for LoRaWAN® deployments in China

- **Singapore:** new technology-neutral regulation to include LoRaWAN

- **Vietnam:** channel plans for LoRaWAN deployments

- **Colombia:** CRC speech on benefits of LoRaWAN in ISM spectrum below 1GHz

- **Uganda:** member support for the discussions with regulator (access to spectrum + specifications...)

- **Italy:** government lobbying for liberalisation of 868MHz band (plus coordination of the contract with Cattaneo)

- **Morocco:** regulator influence to permanently authorise LoRaWAN in 868MHz band and for devices to roam in the Kingdom

- **Israel:** information on redefinition of the spectrum for LoRaWAN below 1GHz

- **Czech Republic:** RFID interference common position definition

- Responses to consultations in France (ARCEP) and UK (OFCOM)

- Technical Committee coordination for preparation of position regarding under control, active discovery, interference management

- Circulation of information in bi-weekly regulatory conference call

- **Russia:** cryptography

MARKETING COMMITTEE UPDATES

The rapid growth of the LoRa Alliance®, along with the maturing of LoRaWAN® technology and ecosystem, called for a segmentation of our marketing activities in 2019. The Marketing Committee decided to promote the alliance and technology through both vertical and horizontal marketing campaigns, leveraging a wide variety of tactics, including trade shows, social media, public relations, webinars, digital marketing, use case and content development.

The horizontal campaigns focused on promoting LoRaWAN and its technical features (FUOTA, security), white paper collaboration with industry analysts and other industry organizations, LoRaWAN certification, and continued growth in network operators and geographic availability. The biggest shift in marketing in 2019 was to deepen its vertical market focus and ramp activities to increase visibility in: smart agriculture, smart buildings, smart cities, smart industry, smart logistics and smart utilities.To engage members with a particular interest in one of these industries, the Marketing Committee launched vertical market working groups. These groups consist of Sponsor and Contributor members who collaborate to deliver their message and products to their specific market segment. Finally, on our website, we have built vertical landing pages that present information about each of the vertical markets and examples of real-life applications developed in each of them.
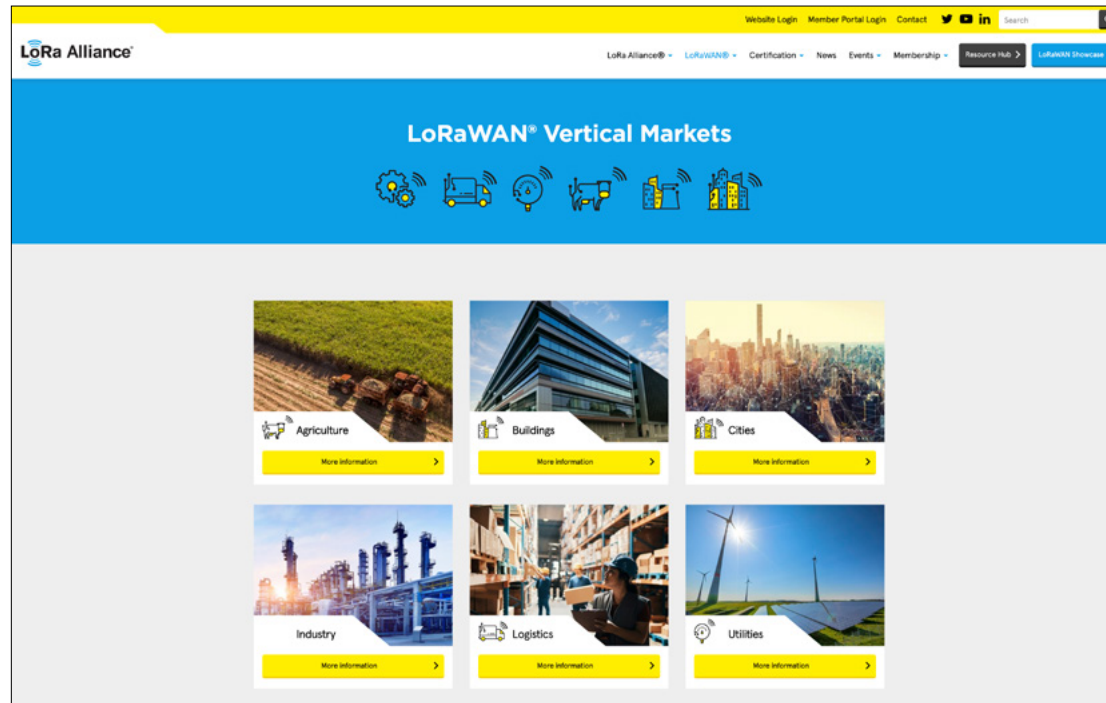
VERTICAL MARKETS STRATEGY & RESULTS

In 2019, we participated in the following vertical events, during which all LoRa Alliance® members were given the opportunity to showcase their products and demonstrate their LoRaWAN® applications.

SMART AGRICULTURE

InfoAg Conference

- St. Louis, U.S., July 23-25

- Individual presentations:

  - Jurriaan Ruys (Sensoterra): "The real-life case for IoT. Get ROI in one crop cycle – how smart soil moisture data helps farmers grow more, with less"

  - Matt Murray (Tech Ag), "The real-life case for IoT. How smart data integration improves crop understanding & yield"

- Workshop delivered by Noelani McGadden (Senet), Jurriaan Ruys (Sensoterra), Jason Steffen (Teralytic)

Agritechnica

- Hanover, Germany, November 10-16

- Speakers:

  - Emmanuel Mounier (Semtech)

  - Gottfried Pessl (Pessl Instruments GmbH)

  - Richard Stamvik (MultiTech Systems, Inc.)

  - Christine Fraser-Boer (Sensoterra)

VERTICAL MARKETS STRATEGY & RESULTS

SMART BUILDINGS

NFMT

- Baltimore, U.S. March 26-28

- Speaker: Charles Paumelle (Microshare): "Achieving Operational Excellence for Your Buildings"

- Participating members with demos: TEKTELIC, Microshare

IFMA World Workplace

- Phoenix, U.S. October 17-19

- Participating members with demos: Microshare, Open Sensors

- Speakers:

  - Panel discussion "How new wireless technology and cloud-based computing are changing." Moderated by Byron BeMiller (Semtech) with panelists: Mike Moran (Microshare) and Lucy Fox (Open Sensors)

IBS – Intelligent Building Systems

- Paris, October 2-3

- Participating members with demos: Decentlab, Microshare and Skiply (joint demo); myDevices, OrbiWise and Sysdev (joint demo); Open Sensors, Robustel and TEKTELIC

- Speakers:

  - Charles Paumelle (Microshare) and Christophe Fouillé (Objenious): "Sustainability and Green Buildings"
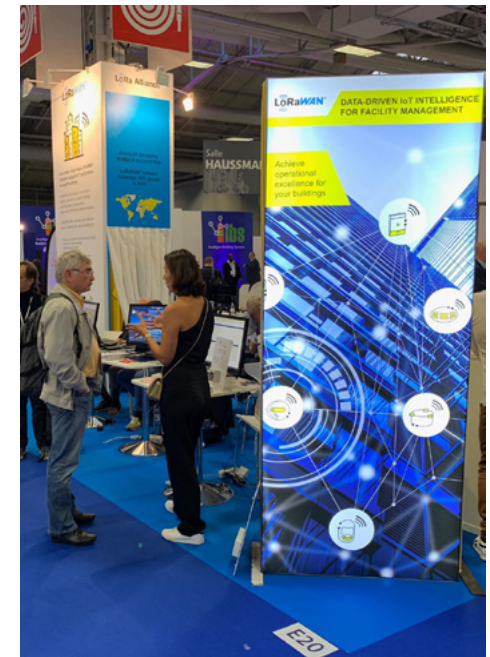
VERTICAL MARKETS STRATEGY & RESULTS

SMART CITIES

5th Smart Cities India 2019 Expo

- New Delhi, May 22-24

- Participating members with demos: SenRa, myDevices, Kerlink, Microchip

- Speaker: Ali Hosseini (SenRa): "Disruptive Technologies for Smart Cities"

Smart Cities Solutions

- Stuttgart, Germany, September 17-19

- Speaker: Boris Stöckermann (Minol Zenner): "LoRaWAN® and Data Management Make a City Smart"

Smart City Expo World Congress

- Barcelona, Spain, November 19-21

- Participating members with demos: Decentlab, Actility, OrbiWise, Digimondo

SMART INDUSTRY

Industry of Things World

- Berlin, September 16-17

- Participating members with demos: Skiply, Aloxy, TEKTELIC

- Speakers:

  - Daniel Quant (MultiTech), "5G, Cloud & Edge Computing, M2M, Interoperability, Legacy Systems and Standards"

  - Roelof Koopmans (Semtech): "LoRa Alliance® and LoRaWAN"

VERTICAL MARKETS STRATEGY & RESULTS

SMART LOGISTICS

Innovatech

- Santiago, Chile, May 2-4

- Participating members with demos: Semtech, OrbiWise, Carnegie Technologies

- Speaker: Jorge Varona (Semtech), Keynote and panel discussion: "Connectivity in the IoT: Choosing the Right Direction"

Intermodal Europe

- Hamburg, Germany, November 5-7

- Participating members with demos: Viloc, Invoxia, Eolane, Stimio, Abeeway, JRI

- Speakers: Pierre Gelpí (Semtech), Moderator: LoRa Alliance® panel discussion featuring Viloc, Invoxia, Eilane, Stimio, Abeeway and JRI

SMART UTILITIES

Distributech

- New Orleans, February 5-7

- Speaker: Ben Doyle, (Senet): "How Metering and Utilities can Benefit from Low-Power, Wide-Area Networking"

India Smart Utility Week

- New Delhi, March 12-16

- Speaker: Ali Hosseini (SenRa): "AMI, Communications and Advanced Analytics" panellist

VERTICAL MARKETS STRATEGY & RESULTS

China Utility Week

- Shanghai, April 15-16

- Speakers:

  - Media presentation delivered by Jeffrey Tan (Alibaba)

  - Hub session delivered by Xiaobo Yu (Alibaba)

AWWA ACE19

- Denver, June 9-12

- Participating members with demos: Haxiot, Senet, TEKTELIC

- Speaker: Ben Doyle (Senet): "LoRaWAN® for Smart Water Utilities"

European Utility Week

- Paris, November 12-14

- Marquis Demo: The Euridis association showcased the first implementation of DLMS over LoRaWAN featuring electricity network products from Cahors and Sicame with support from Acklio, Actility, Semtech and VienTech.

- Participating members with demos: Acklio, IHM Pacific, ProEsys, Vertical M2M

- Speakers:

  - Remi Demerlé (Semtech): "New Digital Applications of LoRaWAN"

  - Jaap Groot (Semtech), "LoRa Alliance® and LoRaWAN Overview"

VERTICAL MARKETS STRATEGY & RESULTS

The LoRa Alliance® hosted 6 webinars covering different aspects of key vertical markets in 2019, including:

1	**May 28**	LoRaWAN® Technologies accelerating the Digital Transformation of GAS Utility Companies (Utilities)
2	**September 19**	How LoRaWAN and the IoT enable Smart Farm management (Agriculture)
3	**October 21**	How LoRaWAN Can Make Your Workspace More Sustainable and Efficient (Buildings)
4	**December 2**	LoRaWAN: Different Scenarios for Industrial Asset Inventory (Logistics)
5	**December 10**	How LoRaWAN Empowers Our Smart Cities (Smart Cities)
6	**July 2**	GS1 & LoRa Alliance (Logistics)

WEBSITE & LoRaWAN® SHOWCASE

Another major investment this year is the LoRaWAN Showcase, the LoRa Alliance®'s online digital catalog of all LoRaWAN Certified^{CM} devices, as well as all LoRaWAN products and services. It is the only official global resource where customers can search to find all LoRaWAN services and solutions, and the Showcase allows ecosystem members to connect, partner and collaborate to develop end-to-end solutions, providing opportunities for new business leads to drive your business forward. The response from our members has been tremendous, and in just the first few months since coming online, the LoRaWAN Showcase reflects more than 200 product listings, with more than 150 of those being certified devices.
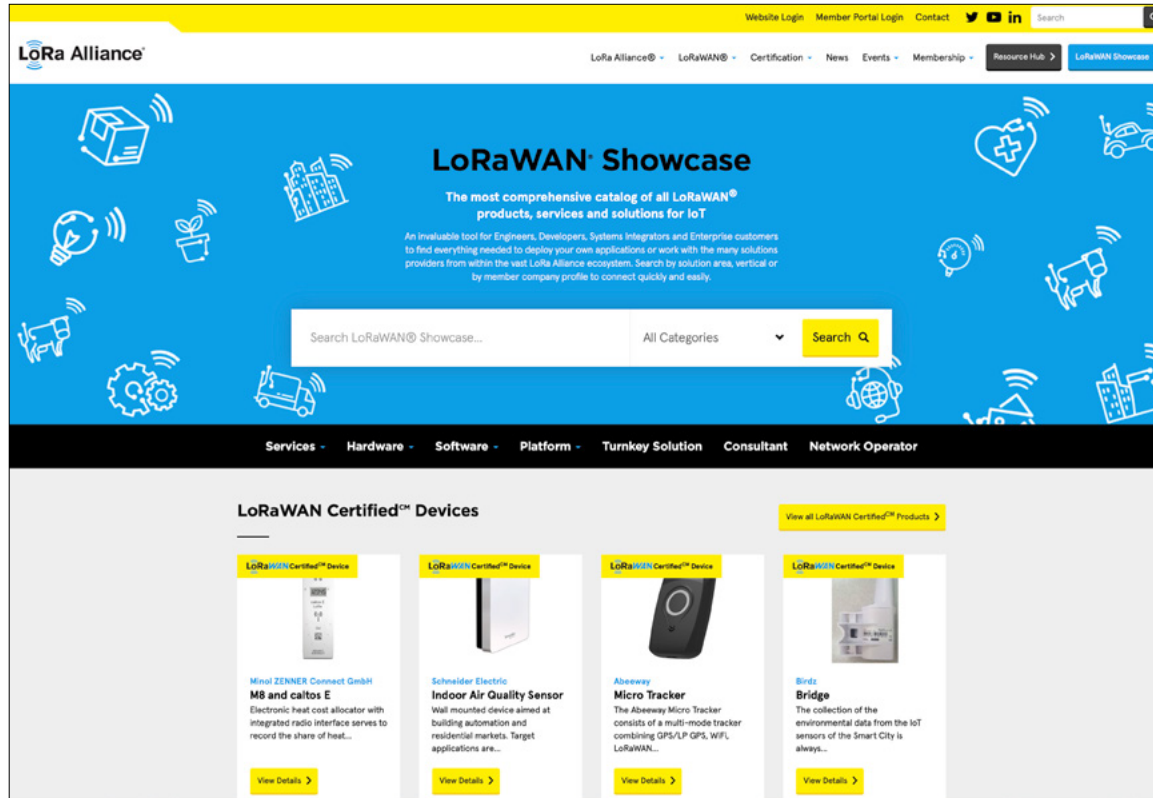
DESIGN HIGHLIGHTS

In 2019, we continued to evolve the brand, finding innovative new ways to deliver impactful and meaningful visuals that stay true to our branding guidelines. A major activity was migrating all assets to the new registered trademarks for LoRa Alliance® and LoRaWAN®, as well as supporting the graphic requirements for our member meetings and significant tradeshow presence.

MWC Booth

DESIGN HIGHLIGHTS

LoRaWAN® Live

Smart Cities India Event

DESIGN HIGHLIGHTS
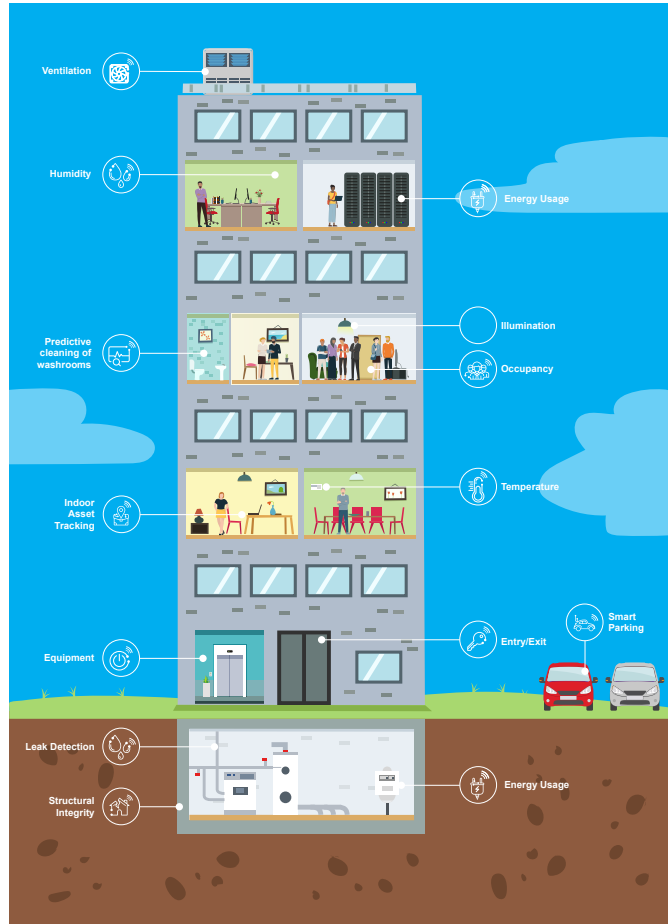
Smart Building Infographic

CUW Booth Design

Certification Test Tool Icon

DESIGN HIGHLIGHTS

Innovatech Booth

Smart Tech for A Sustainable Planet Theme

FierceWireless

DESIGN HIGHLIGHTS
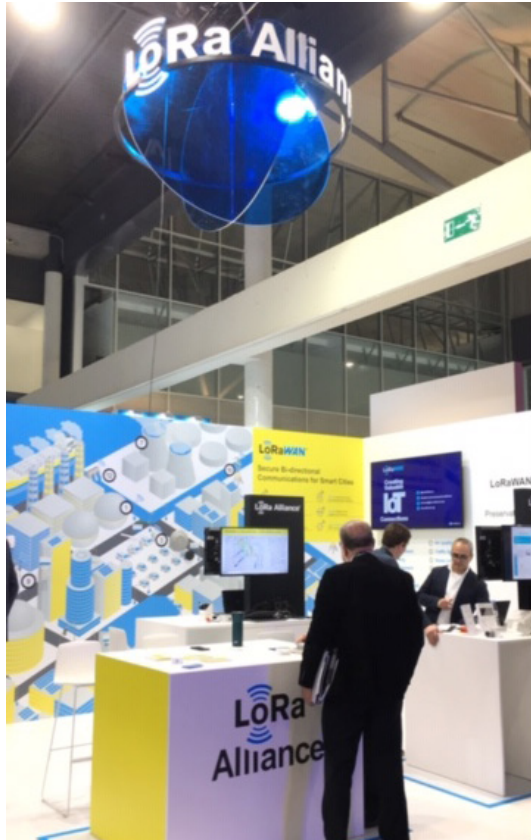
Smart City Barcelona
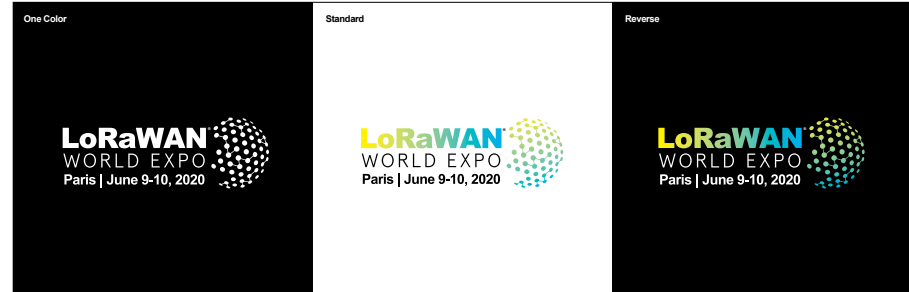
LoRaWAN® World Expo Logo Suite

European Utility Week Booth

2019 MEMBER MEETINGS

Event	Location	Sponsors/ Contributors & Institutional	Adopters	Open House Non-Members/ Media	Total Attendance
10th AMM & LoRaWAN® Live	San Diego	111	47	64	222
11th AMM & LoRaWAN Live	Berlin	158	187	180	525
12th MM & LoRaWAN Live	New Delhi	77	45	167	289
TOTAL	**2019**	**346**	**298**	**411**	**914**

HORIZONTAL EVENTS

THE THINGS CONFERENCE
JANUARY 31, 2019 - FEBRUARY 1, 2019

*LoRaWAN® Ambassador Charles Paumelle
from member company Microshare took The Things
Conference Stage to discuss why it is impossible
to be a complete end-to-end IoT export and
the importance of collaboration.*

MWC BARCELONA 2019
FEBRUARY 25–28, 2019

LoRaWAN® AMBASSADOR SPEAKING ENGAGEMENTS

TTN Conference
Alper Yegin, Actility; David Smith, MultiTech;
Charles Paumelle, Microshare;
Derek Hunt, LoRa Alliance
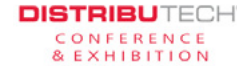
Distributech
Ben Doyle, Senet

MWCB 2019
Donna Moore, LoRa Alliance

Robustel Global Partner Summit
Jon Pearce, Everynet

India Smart Utility Week 2019
Ali Hosseini, SenRa

NFMT
Charles Paumelle, Microshare

China Utilities Week
Jeffery Tan & Xiabo Yu, Alibaba

IoT Innovatech
Jorge Varona, Semtech

IoT World
Donna Moore, LoRa Alliance

ARC European Industry Forum
Richard Stamvik, MultiTech

Smart Cities India
Ali Hosseini, SenRa

Internet of Manufacturing
Sara Brown, MultiTech

ACE 19 - Innovating the Future of Water
Ben Doyle, Senet

Explorers Festival
Tim van Dam, Smart Parks

LoRaWAN® AMBASSADOR SPEAKING ENGAGEMENTS

IoT Tech Expo Europe
Jaap Groot, Semtech

InfoAg Conference
Jurriaan Ruys & Matt Murray, Sensoterra

IoT Expo China
Shibo Yu, Alibaba

Industry of Things World
Daniel Quant, MultiTech

Smart Cities Solutions
Boris Stöckermann, Minol Zenner

IBS - Intelligent Building Systems
Charles Paumelle, Microshare;
Christophe Fouillé, Objenious

IFMA World Workplace
Byron BeMiller, Semtech (moderator);
Lucy Fox, Open Sensors;
Mike Moran, Microshare

IoT Solutions World Congress
Charles Paumelle, Microshare

European Utility Week
Remi Demerlé & Jaap Groot, Semtech

Intermodal Europe
Pierre Gelpí, Semtech

Agritechnica
Emmanuel Mounier, Semtech;
Richard Stamvik, MultiTech;
Gottfried Pessl, Pessl Instruments GmbH;
Christine Fraser-Boer, Sensoterra

IoT Tech Expo North America
Sara Brown, MultiTech

TWITTER

In alignment with our vertical market strategy in 2019, we targeted expansion of our reach in the Twittersphere to more vertically focused audiences, resulting in an overall increase in followers of 27%, finishing the year with 13K followers.

2019 FOLLOWERS:
13K

2019 TWEETS:
766

2019 IMPRESSIONS:
2.26M

2019 AVERAGE IMPRESSIONS/MONTH
188.84K

2019 AVERAGE ENGAGEMENT RATE:
0.8%

2019 RETWEETS:
2,634

2019 RETWEETS/DAY:
219.5

2019 LINK CLICKS
6,363

2019 AVERAGE LINK CLICKS/DAY:
530.25

LINKEDIN

As the leading B2B platform with strong engagement, LinkedIn was a major aspect of our social media strategy and activity in 2019. With this dedicated focus, we successfully grew our LoRa Alliance® LinkedIn page audience by a staggering 212%, ending the year with 11,389 followers. This massive growth was driven by our increased number of vertically focused posts and our highly engaged ecosystem sharing and reposting content about LoRaWAN® and the LoRa Alliance.

2019 IMPRESSIONS:
1.1M

APPROXIMATE IMPRESSIONS/MONTH:
91,350
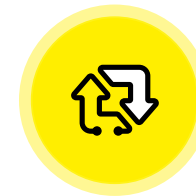
2019 ENGAGEMENT RATE:
4.28%

2019 LINK CLICKS
26,549

2019 AVERAGE LINKCLICKS/DAY:
72

2019 TOTAL SHARES:
986

2019 AVERAGE SHARES/DAY:
2.6

2019 REACTIONS
13,712

2019 AVERAGE NUMBER OF REACTIONS
37.6

PR PROGRAM STATS

LoRa Alliance® visibility in the medi remained strong in 2019, with more than 50% share of voice against competitive technologies in the LPWAN space. We issued 21 press releases and media alerts during the year, 6 of which were significant news for the LoRa Alliance. In addition, we hosted 12 major media engagements: 100 Operator Milestone Release, San Diego Member Meeting, Mobile World Congress Barcelona, NFMT, AWWA Ace, China Utility Week, Berlin All Members Meeting, InfoAg, India Member Meeting, LoRaWAN® and Wi-Fi White Paper release, European Utility Week, and Intermodal, which generated significant coverage throughout the year and met a key goal of broadening LoRa Alliance exposure and awareness in key vertical markets.

364 PIECES OF TIER 1 COVERAGE

5.25M ESTIMATED COVERAGE VIEWS

10 MEDIA EVENTS

1.26B ONLINE READERSHIP

61 MEDIA BRIEFINGS

50 AVERAGE DOMAIN AUTHORITY

10K PRINT CIRCULATION

3.16K SOCIAL SHARES

21 PRESS RELEASES

PRESS RELEASES ISSUED

January 14	LoRa Alliance® announces keynote speakers at The Things Conference
January 22	LoRa Alliance® Passes 100 LoRaWAN® Network Operator Milestone with Coverage in 100 Countries
January 24	LoRa Alliance® to Host LoRaWAN® Live Day in San Diego to Showcase Latest Advances in LoRaWAN Technology, Products and Services
February 21	LoRa Alliance® Ecosystem Highlights Vast Year on Year Growth in LoRaWAN® Deployments and Use Cases in Multiple Verticals at Mobile World Congress Barcelona 2019
March 21	LoRa Alliance® to Show How LoRaWAN® Achieves Operational Excellence for Smart Buildings with Data-Driven Intelligence at NMFT 2019
March 28	NFC Forum and LoRa Alliance® Enter Liaison to Explore Technical Cooperation for IoT Applications
April 3	LoRa Alliance® and DLMS User Association to Bring Internet of Things to Utilities
April 11	Adoption of LoRaWAN® Accelerating in China for Utilities and Energy Applications
May 2	LoRa Alliance® Bringing LoRaWAN® Live! to Berlin; Biggest LoRaWAN Event of the Year will Showcase Value of LoRaWAN Deployments and Certification/Die LoRa Alliance bringt LoRaWAN Live! nach Berlin; das größte LoRaWAN-Ereignis des Jahres zeigt den Wert der LoRaWAN-Implementierungen und Zertifizierung
May 30	LoRa Alliance® Reports Significant Growth in LoRaWAN® Metering Deployments; Will Show Technology's Value for Water Metering and Management During AWWA ACE 2019
June 4	LoRa Alliance® Expands LoRaWAN® Device Certification Program to Ensure Quality of Millions of Connected IoT Devices/LoRa Alliance erweitert das LoRaWAN-Gerätezertifizierungsprogramm, um die Qualität von Millionen von angeschlossenen IoT-Geräten sicherzustellen

PRESS RELEASES ISSUED

Date	Press Release
June 13	LoRa Alliance® Recognizes Key Contributors and Introduces 2019 Board of Directors at All Members Meeting /LoRa Alliance verleiht auf der Mitgliedervollversammlung Auszeichnungen an die wichtigsten Mitglieder und stellt den Vorstand 2019 vor
September 4	LoRa Alliance® to Promote Smart Tech for a Sustainable Planet at LoRaWAN® Live! India
September 11	LoRa Alliance® Announces Expanded LoRaWAN® Live! India Program to Promote Smart Tech for a Sustainable Planet
September 12	LoRa Alliance® to Showcase Industrial LoRaWAN® Solutions at Industry of Things World Berlin
September 23	LoRa Alliance® to Show How to Achieve Operational Excellence for Smart Buildings at Intelligent Building Systems (IBS) Paris 2019
September 24	WBA & LoRa Alliance® Explore New IoT Use Cases Incorporating Wi-Fi & LoRaWAN® Technologies
October 8	LoRa Alliance® Announces First Authorized Test Houses in India and Global Availability of the LoRaWAN® Certification Test Tool
October 29	LoRa Alliance® Demonstrates Leadership in Utilities Networking Applications; To Showcase LoRaWAN® Solutions at EUW
November 12	Major Brands Join the LoRa Alliance® at Leadership Levels Confirming Continued Momentum for LoRaWAN® as the Global De Facto LPWAN Standard
December 9	LoRa Alliance® CEO and Chairwoman Donna Moore to Deliver Keynote At The Things Conference 2020

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The LoRa Alliance® is the largest LPWAN organization globally. Our work and the success of the LoRaWAN® standard wouldn't be possible without our ecosystem, which is unrivalled in its size and range of companies. Our list of members as of December 31, 2019 follows.

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