

# About LCA

## **Why is there a need for a Light Communications Alliance?**

The Light Communications Alliance (LCA) is formed to lead the global adoption of Light Communications technology offering unprecedented wireless capacity and building a far-reaching, coherent & sustainable ecosystem.

The LCA is committed to enabling large scale deployments of LC. We promote, encourage and support the development of a competitive and comprehensive ecosystem.

The LCA mission is to drive a consistent, focused and concise approach to market education that will highlight the benefits, use cases and timelines for LC adoption with structure activities around the Light Communication domain, at different levels: Publications, market analysis, use cases, liaison, technology and management.

## **How much does it cost to participate?**

€5,000 per year.

## **How frequently does the LCA meet?**

The LCA has one annual general meeting. Additional meetings may be help by various working groups and the board of directors.

## **What are you hoping to achieve?**

To foster and enhance wide ranging ecosystem engagement. Aligning leaders across every industry to develop or envisage business models using Light Communication systems & technologies by defining a standard of education in an efficient communications & co-operation framework.

The benefits expected of the Alliance are the followings:

- Opportunity to shape the vision and messaging for LC on a global scale.
- Improved visibility on the developing Light Communication market to secure a better position in a growing market.
- Remaining at the cutting edge of LC technologies – ensuring investments in infrastructure or service offers to customers are in-line with real market capabilities and evolving capabilities.
- Early identification of service offerings based on OCC/LiFi.
- Creation of a community working and promoting Light Communication, sharing concrete approaches to deliver solutions in line with real needs.
- Support for relevant actions that accelerate the time to market through a push-pull process.
- Market enabling, through a strategic exploitation plan for well-defined technologies or supporting actions in the relevant standardization bodies (e.g., IEEE 802.11bb).
- Reinforcing interactions with other industrial Alliances and Standards Development Organizations to help the LCA address various topics including but not limited to product certification.
- Promote common white papers to provide technical and marketing direction.

## **Why should companies join the Light Communications Alliance?**

The LCA offers a unique opportunity bringing together global actors in communications, lighting and device manufacturing industries, as Light Communication improves and impacts many other fields.

Founding members and new comers, will take leadership in defining the roadmap of the Alliance with a cooperative and balanced approach. Members also benefit from a vibrant ecosystem of active contributors offering solutions, products & services, which create new and sustainable business opportunities.

## **Is the technology and market sustainable to create a new organization?**

The LCA is based on the convergence of four key trends:

- Market
  - o The demand for wireless communications is increasing at over 50% per year, creating a need for more spectrum, greater deployment of dense, small cell, systems and energy efficiency. There are varying estimates of the market size of Light Communications, each providing high levels of confidence in the sustainability of the LC market:
    - “The LiFi market is expected to grow to \$75.5 Billion by 2023 with CAGR of 80%.” – Global Market Insights, Inc.
    - “The visible light communication market is expected to grow at a CAGR of 62.9% between 2017 and 2022, to reach USD 14.91 Billion by 2022 from USD 1.30 Billion in 2017.” – MarketsAndMarkets
    - Machine condition monitoring market size was valued over USD 1.5 billion in 2014. It is likely to grow at over 7.5% and exceed USD 3 billion from 2016 to 2023. – Global Market Insight
- Technology
  - o There is an exponential growth in the number of companies working to deliver LC systems, services and components.
- Standards
  - o The IEEE 802.11bb is working to create a standard supported by the complete Wi-Fi ecosystem of partners, including chipset, infrastructure and device vendors along with a multitude of end customers from the telecommunications, automotive, industrial and other markets.
  - o The expected completion of the standard in the first half of 2021 creates a specific and achievable goal, providing a heartbeat for the development and deployment of the technology.
- Alliances
  - o The LCA will have a proactive engagement with some of the most influential organizations in the world including the Ethernet Alliance, Wi-Fi Alliance, IEEE and other relevant industry organizations that meaningfully impact the technology adoption on an everyday basis.

Original answer:

“In addition to the founding members that all have a strong influence in their respective field, and that strongly believe in the technology, its technical potential, social benefits, market perspectives and sustainability, the LCA benefits from the decision of the IEEE 802.11 Working Group to create a Task Group to work on an LC amendment the IEEE 802.11.bb standard.

Also other standards already exist or are being created to standardize various light communication technologies. The most famous example is the IEEE 802.15.7-2011, which is now being revised to have a greater focus on OCC.

In a near future, the LCA will also interact with other Alliances and Standards Development Organizations of interest. The interaction with other industrial Alliances is motivated by the need to support coordinated actions, such as certification. It will also offer an opportunity to learn and prepare the required processes and capabilities to facilitate an independent certification process, if this should be required.”

### **Who can join ?**

The LCA is open to membership from all industries – including light and communications chip manufacturers, OEMs, network operators, lighting manufacturers, and light communications innovators. Key partners and pioneers from others industries such as avionics, automotive, healthcare would also be considered.

### **Why is Light Communications a real game changer?**

With an unprecedented volume of connected objects and wireless devices, Light Communication technologies such as LiFi could support the coming exponential growth of the demand of wireless communications and data in addition to technologies such as Wi-Fi-6 and 5G.

These technologies will also support these tremendous changes adding another layer of security for critical infrastructures and connections.

It's also a social catalyst that re-empower users with a meaningful technology that can provide clearly transparency and choice about when they are connected and to what.

It is a real and strong opportunity to design a bright future for our planet with a power efficient technology that can reuse existing LED infrastructures.