Public Lighting

Unite with Light

Challenge Introduction

In today's society, there is a lack of social cohesion. Many people do not even know their direct neighbors. Wouldn't it be great if we could use the potential of light in public spaces to create meaningful experiences that connect, enrich, and inspire people? Interactive and dynamic lighting has proven effective in enhancing people's moods, bringing them together and making them work together to achieve things.

Typically, light festivals are places where such interactive installations are presented, but they are mainly for a limited time (a weekend, a week or sometimes a month). To enhance connections in, e.g. a neighborhood, a permanent installation would be more logical.

In this challenge, we invite you to explore what lighting can do for a specific community in a particular place for extended periods. You can choose where you want to focus on: what type of interaction, in which community or specific area. Depending on the background of your team you can focus on the effect of lighting on social cohesion, the interaction of people with light, the design, the technical aspects and/or the business case.

Who is behind this initiative?

The **TU/e Intelligent Lighting Institute (ILI)** was established in 2010 to investigate novel intelligent lighting solutions that will become within our reach through the large-scale introduction of LED technology and the integration with IoT sensor systems, emphasizing how these novel solutions might affect people. In addition, ILI aims to provide scientific evidence for the claims that go with these novel lighting solutions.



In this challenge, we collaborate with **Team IGNITE**, the first art&tech student team that aims to unite people with light.

ILI also provides living labs on the TU/e campus, which you may use for your project. E.g. the Market Hall in MetaForum has special sensors for crowds and flow of people, as well as a lighting installation that can be used to test ideas.



Elke den Ouden is TU/e Fellow and responsible for the living light labs and developing new business in public-private value networks. She is also responsible for the lighting theme in challenge based learning at TU/e innovation Space.





How does this challenge enhance connections?

This challenge – Unite with Light – connects to the theme Enhance Connections directly, as it aims at improving connections between people living in the same area, but not yet knowing each other. By improving social cohesion through outdoor activities in a neighborhood, people become more resilient, happier and healthier. In short: improving quality of life through light.

Relevant considerations for the challenge

The Intelligent Lighting Institute and Team IGNITE are co-challenge owners, who will share their knowledge, experience and network with e.g. companies or public organizations. Depending on the design we may also contribute by providing lights and other materials for a prototype or scale model. Once the team working on this challenge knows which direction they want to go, we will help to reach experts in our network.



