

Assistant (Student)

Implementation of a Techno-Economic tool for VLC

Future IoT will need wireless links with high data rates, low latency and reliable connectivity despite the limited radio spectrum. Connected lighting is an interesting infrastructure for IoT services because it enables visible light communication (VLC), i.e. a wireless communication using unlicensed light spectrum. This work will aim at developing a tool to perform an economic evaluation of the proposed solution in the particular case of a smart office.

For that purpose, the following tasks will have to be performed:

- Definition of a high-level framework specifying the different modules that will be implemented as well as the required inputs and the expected outputs of the tool.
- Development of a cost evaluation Excel-VBA tool. This tool will allow to evaluate different variations of the selected case study and if possible, to compare different alternative models (e.g., dimensioning) or scenarios (e.g., building types).

Prerequisites

- Excel and VBA

Advisors

Carmen Mas Machuca