VisIoN is a Marie Skłodowska-Curie Action Innovative Training Network (MSCA ITN). It is a joint research training and doctoral programme, funded by the EU and implemented by a partnership of high profile universities, research institutions and industrial partners that are located in 7 different countries.
VisIoN is an acronym of the project “Visible light based Interoperability and Networking”

VisIoN is a joint research training and doctoral programme, funded by the EU and implemented by a partnership of high profile universities, research institutions, and industrial partners that are located in 7 different countries.

This project aims to train a new generation of early-stage researchers (ESRs) in the emerging area of Visible-Light Communications (VLC).

The programme is structured around 15 Individual Research Projects within 3 main research topics:

- Smart Cities, Offices and Homes
- Smart Transportation
- Manufacturing and Medical

EXTEND THE TRADITIONAL ACADEMIC RESEARCH TRAINING

Through research on co-supervised individual projects focusing on selected applications, the distinctive feature of VisIoN is the interdisciplinary nature of its intended research focus synergizing wireless communication technologies and optical communications.

« VisIoN will be the very first Training Network dedicated to the VLC technology and will make significant contributions to the understanding and technical knowhow of this emerging field. » Ali Khalighi, Centrale Marseille, project coordinator

In addition to technical training through PhD courses, dedicated tutorials and workshops organized by the Network, the 15 talented doctoral candidates, which have been recruited will benefit from a wide range of complementary non-technical training activities such as entrepreneurship, authoring scientific papers/patents, dissemination, etc.

The participation of industrial partners will further promote research training with commercialization perspectives enabling ESRs to fully integrate theory with hands-on practice.

VISIBLE LIGHT COMMUNICATION

Research in VLC requires the training of personnel with a solid understanding of optical communications and photonics devices/sub systems along with a background on wireless communications, information theory, physical and upper-layer design. Furthermore, optical transmission in an unguided medium brings along unique challenges and requires a good understanding of the light sources, modulation/coding and channel modelling and characterization for efficient transceiver design.