



PHOTONICS²¹

PHOTONICS PUBLIC PRIVATE PARTNERSHIP

The LEDLUM project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731466.

This project is an initiative of the Photonics Public Private Partnership.



LEDLUM H2020 PROJECT:

Coordinator:

Technikon Forschungs- und Planungsgesellschaft mbH

coordination@ledlum-project.eu

Tiny Light Engine for Large Scale LED Lighting

General Project Information

- Project reference: **731466**
- Project start: **1st November 2016**
- Duration: **3 years**
- Total costs/EC contribution: **EUR 4.118.521,25**
- **7 partners** from **4** different **European countries**
- Mission: development of a highly integrated cost competitive **light engine technology platform** for Solid State Lighting (SSL)
- Website: www.ledlum-project.eu

Project Goal

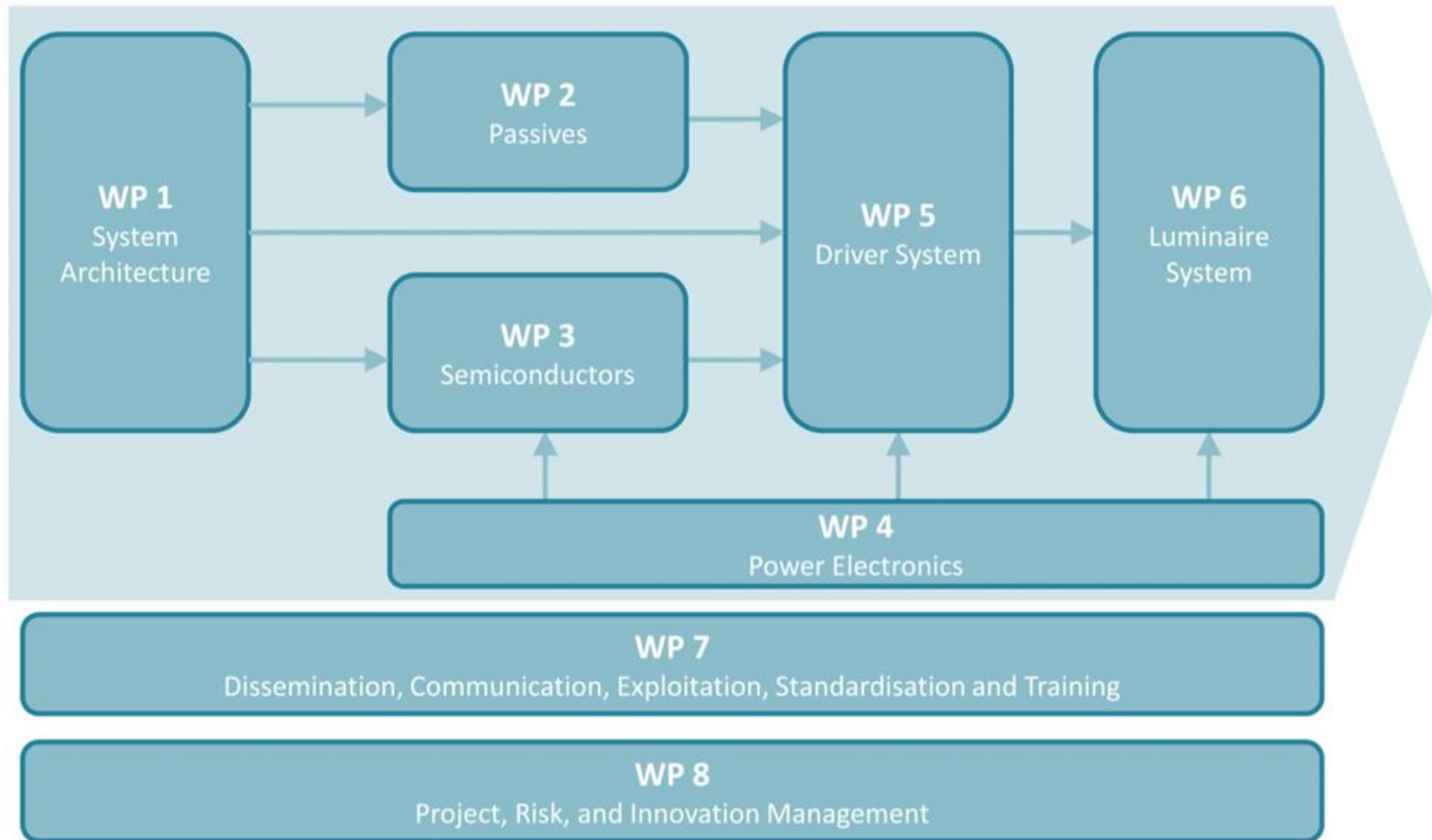
LEDLUM is committed to make a **major innovation** step in overall solid-state lighting engines by

- 90% size and weight reduction of the power electronics part in the LED driver (power density of **5 W/cm³** at max 50 °C),
- reducing material cost by a factor of 2,
- reducing energy losses by 45 % (**93% efficiency**) and
- increasing the expected lifetime from 5 to **10 years**.

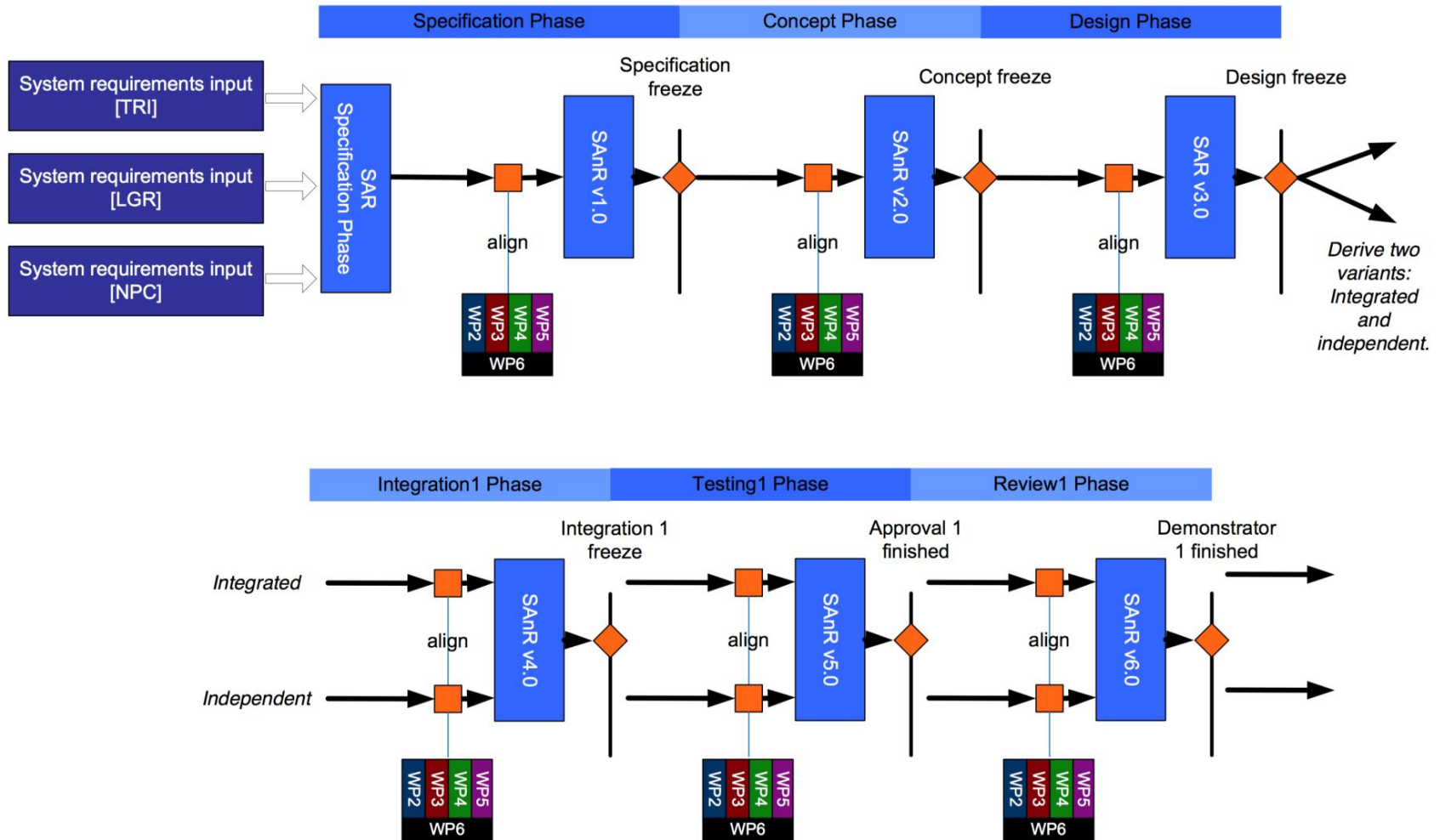
Showcased through 2 approximately **50 W** demonstrators

- LED-driver independent of an LED-module in a lighting system for the industrial lighting market
- integrated light-system for design lighting

WP Interaction



Work Flow



Impact

- LEDLUM aims for the world's **smallest SSL engine** with **lowest weight** and **longest expected lifetime** and **cheapest material cost** based on novel technology and IP protected solutions.
- Technological **advances in the field of VHF power electronics** based on European research.
- LEDLUM will **strengthen Europe's lighting business** with **advanced technology** and will lead to **higher skilled jobs** in development and production.

Contacts

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LEDLUM Grant Agreement No. 731466

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