



# PARTNERSHIP FOR HORIZON EUROPE

Thursday, May 15th 2025

# KEYIA IN A FEW WORDS

Who we are



## KEYIA IN A FEW WORDS

- Equipment manufacturer for Smart Lighting & Smart City ;
- French company, created in 2021;
- Specialized in embedded image treatment and IoT radiocommunications ;
- Based in Toulouse ; Significant know how in embedded electronics ;
- Production in France (Tarn, North of Toulouse) ;
- ~ 4000 sensors and devices sold.

## OUR PHILOSOPHY

### BECAUSE STREET LIGHTS ARE

- Placed on every street at standard interdistance
- Standardized
- May be 24/24 H electrically powered
- A high point that makes a significant advantage for:
  - Making Radiocommunications easier
  - Observing uses of the city



### THEY HAVE A CENTRAL ROLE IN CITIES DIGITALIZATION

- We consider the street light network as the backbone infrastructure for Cities digitalization ;
- All our products are « adds on » to street lights ;

## A COMMON POINT TO ALL OUR PRODUCTS

### USE OF THE ZHAGA Socket

- The Standard connector of the Street Light Industry ;
- Increasingly present on street lights (up or above) ;



- Makes the products « Plug & Play » ;
- Makes the products standard & interchangeable ;



## OUR RANGE OF PRODUCTS - TODAY

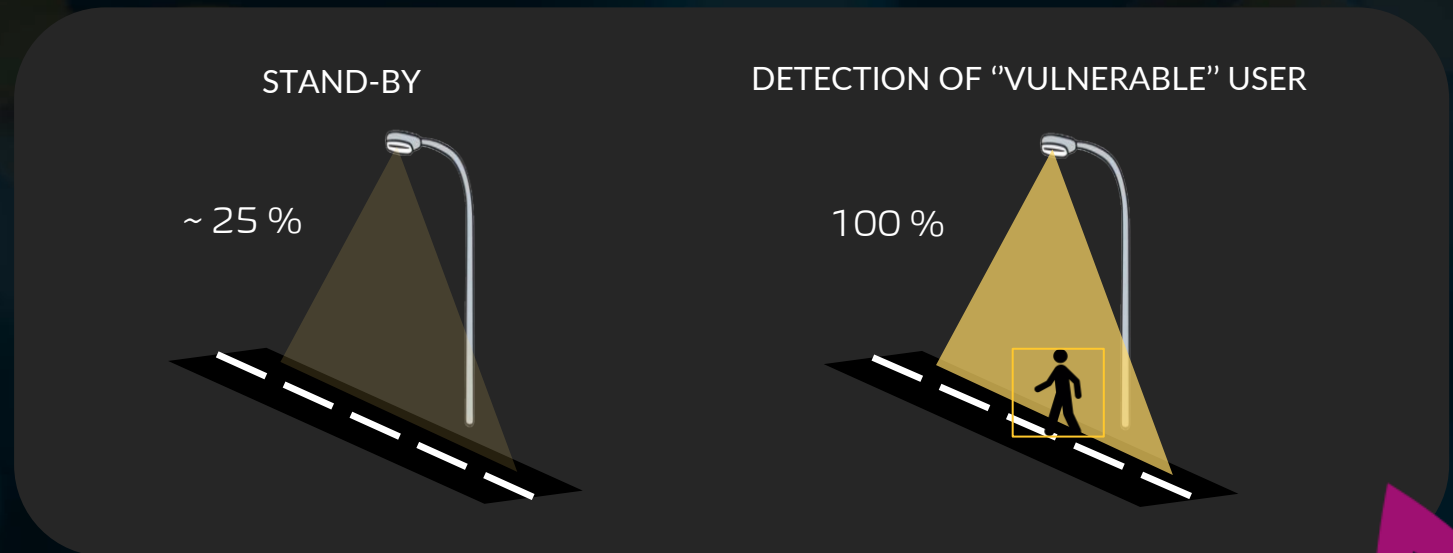
### 1 ) IMAGE TREATMENT - DETECTING AND ANALYSING MOVEMENT

STRIGOO®



+ 3500 sold

Selective detection > 50% energy savings



### 2) CONNECTING STREET LIGHTS

- Radio nodes for connectivity to cities Supervisors / Hypervisors ;
- Several radio protocols Mesh / Star (LoRa) / 4-5G ;
- Use of a standard for communication : TALQ compability.



# THE DEMIAFE PROJECT

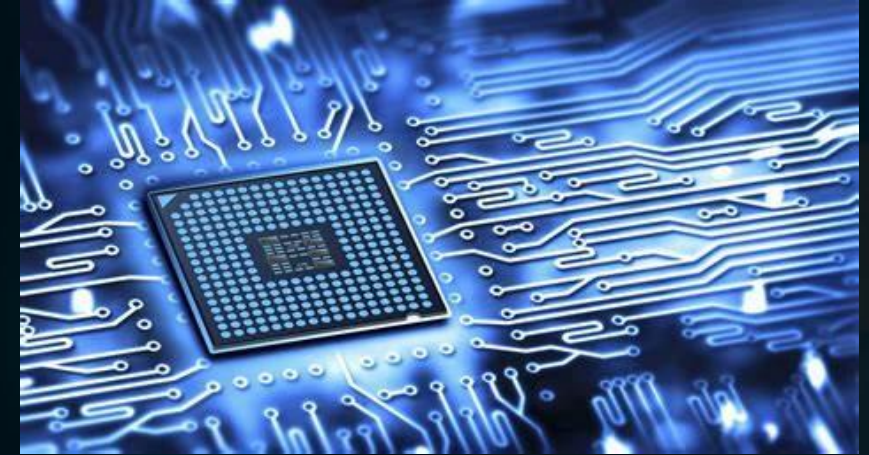
One step further to city digitalization – Embedding AI with NPU

## NEW PRODUCTS DEVELOPMENT

- Most recent semiconductors have now onboard NPU (neuronal processing unit - NPU) ;
- NPU are architectures dedicated to AI inferences with a very good power efficiency.
- They allow embedded AI in a small connected objects ;
- With a competitive energy consumption ;



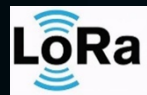
- Makes possible treatment by embedded AI directly from an « add-on » object on a street light.





## SENSOR OBJECTIVES : DATA COLLECTION

- Smart counting / smart flow
- Smart detection / smart parking
- Additionnal services : traffic in wrong direction, too frequent overspeeding ...
- Zhaga socket, standard product, easy to set-up ;
- Data collected in a file/frame – Standardized for TALQ Format – 5G & LoRa networks



## THE DEMIAFE PROJECT :

### DEMonstrator for Frugal and Embedded Artificial Intelligence for Smart City applications

- Is a project of Demonstrator – Aiming a Technology Readiness Level (TRL) of 7-8 ;
- Aiming Industrialization stage at end of project ;
- For a 2,5 years duration ;
- Toulouse as a test-pilot City. Other Cities may candidate if interested.

# PARTNERSHIP FOR EUROPE

What we are looking for

## PROJECT PLANNING

### CURRENT STEP

- Feasability studies finalized ;
- Project Funding on-going :
  - Public funds with an OCCITANIE region research financing program
  - Private funds



### FURTHER STEPS

- Development start : september 25 (if DEMIAFE fully funded)
- Prototypes availability (stage 1) : september 26 - Installation in Toulouse (only)
- Pre-serial availability (stage 2) : mid-27



## OUR RESEARCH

- European town(s) interested to test preserial sensors (stage 2) ;
- Supervision / Hypervision platform editor(s) to test integration (or cities) ;
- Partner(s) for market study / pre-commercialization.



# THANK YOU !

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